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A RESUME

—OF—

SURGICAL OPERATIONS

FROM APRIL 26, 1893, TO MAY 3, 1894,

IN THE PRACTICE OF

DUDLEY P. ALLEN, M. D.,

PROFESSOR OF SURGERY IN THE MEDICAL DEPARTMENT OF THE
WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO.

VISITING SURGEON TO LAKESIDE AND CHARITY HOSPITALS.

CONSULTING SURGEON TO CITY HOSPITAL.

MEMBER OF THE AMERICAN SURGICAL ASSOCIATION.

By WILLIAM H. NEVISON, M. D.,

ASSISTANT TO DR. ALLEN.



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The following is a summary of the operations in the order in which they have been considered :

Laparotomies.....	80
Abdominal operations (not laparotomies).....	18
Operations upon the chest.....	28
Operations upon the genito-urinary organs—males..	25
“ “ “ “ “ females	41
Operations upon the rectum and anus.....	30
Operations upon the head and neck.....	59
Operations upon the upper extremities.....	35
Operations upon the lower extremities.....	37
Miscellaneous operations.....	2
Total.....	<u>355</u>

LAPAROTOMIES.

Appendicitis.....	30
Oophorectomies and Salpingectomies.....	23
Ovariectomies.....	7
Laparotomies for uterine fibroids.....	5
Pelvic abscess.....	1
Tubercular peritonitis.....	1
Gunshot wounds of intestine.....	1
Cholecystotomies.....	2
Intestinal obstruction.....	3
Inguinal colotomy.....	1
Complicated pregnancies.....	2
Tubal pregnancies.....	2
Ventral fixation uterus.....	1
Sarcoma mesentery.....	1
Total.....	80

PREPARATION OF PATIENT.

The bowels were moved by laxatives the day before the operation and the lower bowel cleared by an enema of water the following morning.

The day preceding the operation the patient received a light diet, and no breakfast the morning of the operation. The evening before a bath was given, and an antiseptic dressing applied.

ANÆSTHESIA.

Ether was given in all cases unless contraindicated by lung or kidney complications. In many cases the patient was given chloroform until unconscious, and the operation then continued under ether.

PREPARATION OF INSTRUMENTS AND DRESSINGS.

The cat-gut was soaked in a solution of bi-chloride for 12 hours, and then preserved in alcohol and juniper oil, and boiled in alcohol just before being placed in the glass receptacle ready for use.

Silk was boiled in a solution of carbolic acid, and preserved in a solution of the same. Silk worm gut was washed in bi-chloride just before using.

The dressings, towels and operating gowns were sterilized before the operation. Sponges were thoroughly beaten and washed, then placed in a solution of permanganate of potash and bleached in sulphurous acid. They were preserved until used in a solution of 1 to 20 carbolic.

The instruments were sterilized before operation, and placed in trays with distilled water. The hands of the operator and assistants were thoroughly scrubbed and immersed in a saturated solution of permanganate of potash, and bleached in a solution of oxalic acid and hyposulphide of soda.

IRRIGATION AND DRAINAGE.

Distilled water was used for irrigation. Drainage was used in those cases in which pus was present, or when there was prolonged oozing from torn adhesions. In the latter instances a Milkulicz tampon, tightly-packed, was found to control the hemorrhage, and thoroughly drain the cavity.

AFTER TREATMENT.

Nothing was given by stomach until all feelings of nausea had passed, and the patient was then allowed a little hot tea or hot water, and later milk and lime water, or beef tea.

Morphine was given as sparingly as possible and only for severe pain. The intense thirst was greatly relieved by stimulating enemata.

On the third or fourth day the bowels were moved with small doses of mild chloride, followed by salts.

The interior strips of the tampon were removed the day following the operation, and the handkerchief on the fourth or fifth day. The removal of the handkerchief was greatly facilitated by attaching a silk thread to the center, and by pulling this the tampon was everted. The abdominal stitches were removed as a rule about the 10th day.

APPENDICITIS (CHRONIC CASES.)

No.	Nat. age, sex.	In consultation with	Date and place of operation.	Stage in which operated.	History of previous attacks.	Incision.	Subjective symptoms.	Objective symptoms.	Operation.	Appendix and concretions.	Result.	Remarks.
I E. H. G.	Am. 21 male.	Dr. D. H. McMillan, Orville, O.	Lakeside Hospital, April 26, 1893.	Between attacks.	Had 8 attacks during last year.	Over caecum.	Localized pain over caecum during attack.	No dullness; no induration—extremely tender during attacks.	No adhesions; appendix on anterior surface of caecum; amputated and invaginated stump with cat gut sutures. Closed abdomen with silk worm gut sutures. No drainage.	Mucous membrane ulcerated and constricted near its base; no concretion.	R.	Wound healed absolutely by first incision. Patient left hospital 28 days after operation. No trouble since.
II C. S.	Ger. 27 male.	Dr. M. Borts.	Lakeside Hospital, April 28, 1893.	Second operation between attacks.	Recurrent attacks during year.	Over caecum.	Tenderness when wound would close.	Fistula remained after operation made 7 months before; when a abscess was drained but could not find appendix.	Adhesions from previous operation. Appendix on posterior surface of caecum; ulcerated and in two parts; portion attached to caecum $\frac{1}{4}$ inch long was trimmed and edges invaginated. Dissected out fistulous tracts. Tampon of gauze.	Distal portion of appendix one inch long ulcerated and completely detached from caecum.	R.	Wound healed by granulation. Patient left hospital 27 days after operation. Wound was entirely closed in about four months.
III F. H.	Am. 23 female.	Dr. T. N. Oakes, Ridgeville, Ohio.	Lakeside Hospital, May 16, 1893.	Between attacks.	Recurrent attacks for 6 years.	Median incision.	Tenderness over caecum during attacks which had no connection with menstrual periods.	Nothing to be felt by external or vaginal examination.	Appendix constricted and closely adherent to caecum. Its entire length was dissected off and opening into caecum closed with cat gut. Closed abdominal wound with silk worm gut sutures; no drainage.	Appendix ulcerated and bent twice at right angles, forming almost complete stricture at these points; no concretion.	R.	Patient went on nicely for a few days, then developed symptoms of peritonitis. Was in very bad condition for several days. Wound supplicated superficially. Patient made complete recovery.

IV O. C. L.	Am. 20 male.	Dr. F. W. Upson. Conneaut, Ohio.	Lakeside Hospital. May 17, 1893.	Second operation between attacks.	Recurrent attacks during 16 months.	Linea semi- lunaris.	Tenderness over caecum.	Fistula remain- ing after opera- tion made one year previously when appendix was not found.	Followed stumps down to an appendix—amputated —sewed stump with catgut. Packed wound with gauze.	Appendix ul- cerated com- pletely thro' it and only a stump about $\frac{1}{2}$ inch long remained. No concretion.	R.	Uninterrupted re- covery. Wound healed in about 3 months. It is re- garded perfect health.
V J. G.	Am. 28 male.	Patient a resident of Cleveland.	Charity Hospital. Oct. 6, 1893.	During an attack.	4 attacks in 2 years.	Over caecum.	Tenderness over caecum during attacks.	Slight resistance and extreme tenderness on pressure over caecum.	No adhesions; amputat- ed appendix. Sewed stump with catgut; eliose of abdominal wall with silk. Prim- ary sutures—no drain- age.	Appendix swollen and mucous mem- brane ulcer- ated. No con- cretion.	R.	Uninterrupted re- covery. Wound healed by first intention.
VI C. H. G.	Am. 33 male.	Drs. F. W. Fletcher and G. D. Palmer, Geneva, Ohio.	Lakeside Hospital. Oct. 20, 1893.	Between attacks.	Recurrent attacks during 6 months.	Over caecum.	Continued tender- ness on pressure over caecum.	Slight indura- tion—no dual- ness except during attacks.	Appendix amputated and stump sewed with catgut. Appendix was adherent to caecum and had ulcerated through into caecum about its middle— closed opening with catgut. Gauze tampon.	Appendix ul- cerated and constricted. No concretion.	R.	Uninterrupted re- covery. Entirely healed in about 6 weeks.

APPENDICITIS.—(CHRONIC CASES.)

No.	Nat., age, sex.	In consultation with	Date and place of operation.	Stage in which operated.	History of previous attacks.	Incision.	Subjective symptoms.	Objective symptoms.	Operation.	Appendix and concretions.	Result.	Remarks.
VII E. S.	Am. 22 male.	Dr. C. D. Noble, Oberlin, Ohio.	Residence, Oct. 26, 1893.	During acute attack.	Had one attack two years ago.	Over caecum.	Great tenderness in region of appendix.	Induration and dullness, and very tender on pressure.	Found abscess containing several ounces of pus. Irrigated and packed with gauze.	Appendix not found. No concretion.	R.	Sinus remained for several weeks after operation.
VIII W.H.L.	Am. 37 female	Patient from New Philadelphia, Ohio.	Lakeside Hospital, Nov. 15, 1893.	Between attacks.	Recurrent attacks during 6 years.	Over caecum.	Tenderness on deep pressure. No concretion with monthly periods.	Nothing to be felt. Vaginal examination showed uterine appendages normal.	No adhesions. Amputated appendix; sewed stump with cat gut; greatly thickened abdominal wall around with silk worm gut. No drainage.	Appendix thickened. No concretion.	R.	Uninterrupted recovery—healed by first intention. Left hospital 28 days after operation.
IX H. D.	Am. 17 male.	Dr. G. C. Ashmun.	Residence, Dec. 2, 1893.	During a mild attack.	Had 7 attacks in 4 months.	Over caecum.	Continued tenderness over region of caecum.	Extensive induration and dullness. Very tender during attacks.	Omentum and caecum in a mass of adhesions. Appendix had been on anterior surface of caecum; only granulation tissue to be found. Sewed opening into caecum with cat gut.	Nothing left of appendix but a few shreds. No concretion.	Died 15 days after operation.	Wound suppurated profusely. 8th day after operation developed abscess of left parotid which was opened and drained. Patient died of general infection.

X.	Am. 24 male.	Dr. G. A. Orwig and G. W. Stevenson.	Charity Hospital, Dec. 4, 1883.	During attack when patient was in collapse.	Had several attacks during 1½ years.	Over caecum.	Pain over entire abdomen at time of operation.	Extreme tympanites; no vomiting could be obtained; had all appearances of patient suffering from obstruction of the bowels; had seen patient 2 months previously and diagnosed appendicitis.	Appendix very long and was wrapped completely around caecum at entrance of ileum and bound by adhesions, thus producing occlusion of the bowel at this point; dissected off and amputated; appendix, closing opening into caecum with catgut. Tampon iodiform gauze.	Appendix 4½ inches long, catarrhal condition of mucous membrane; no concretions.	R.	Was in very low condition for a week after operation. Bowels moved fourth day after operation; had two relapses from catarrhal condition and tumbling. Wound suppurated; entirely healed 7 weeks after operation. Left hospital 37 days after; no further trouble.
XI.	Ger. 48 female.	Dr. W. H. Humiston.	Dr. Humiston's Hospital, Dec. 6, 1883.	Quirescent stage.	Attacks during previous 3 months.	Over caecum.	Dull pain over caecum greatly increased after any exertion.	Extensive induration, dullness and tenderness on pressure.	Caecum and omentum in a mass of adhesions; appendix destroyed, stump with exception of short stump; sewed opening into caecum with catgut. Tampon of gauze.	Only small stump of appendix retained; mucous membrane of date seed.	R.	Uninterrupted recovery. Wound healed in four weeks. Patient left hospital 25 days after operation.
XII.	Am. 21 male.	Dr. I. A. Elson, Smithville, Ohio.	Residence, Dec. 13, 1883.	During an attack.	Slight attacks during day or two before operation.	Over caecum.	Dull pain between attacks; very acute during attacks.	Induration and dullness of caecum. Pain over McBurney's point.	Caecum adherent to abdominal wall; appendix lay anteriorly in a mass of adhesions; was dissected off and amputated. Opening into caecum sewed with catgut.	Appendix ulcerated, and about its middle was tightly constricted.	R.	Uninterrupted recovery. Wound entirely healed in six weeks. Operated by Dr. Nevison.

APPENDICITIS.—(CHRONIC CASES.)

No.	Nat., age, sex.	In consultation with	Date and place of operation.	Stage in which operated.	History of previous attacks.	Incision.	Subjective symptoms.	Objective symptoms.	Operation.	Appendix and concretions.	Result.	Remarks.
XIII. J. M. G.	Am. 37 male.	Dr. C. S. Hiddleson, Atwater, Ohio.	Charity Hospital, Dec. 15, 1893.	During quiescent stage.	3 severe attacks during 4 years.	Over caecum.	Tenderness on deep pressure over caecum.	Indistinct dullness; no dullness. During attacks had distinct tumor and dullness over caecum.	Appendix in adhesions between pelvic wall and caecum. Impacted and sewed with gauze. Tampon iodine form gauze.	Appendix greatly thickened with catarrhal condition of mucous membrane.	R.	8th day patient developed phlebitis of right leg which subsided in a few days. Wound entirely healed about four weeks after operation.
XIV. F. N. R.	Am. 40 male.	Dr. J. P. Sawyer.	Residence, March 14, 1894.	During severe attacks.	7 attacks during last 6 or 7 years.	Over caecum.	Great pain during attacks.	Induration and dullness with slightest pressure.	Opened general abdominal cavity. Found abscess to outer and posterior side of caecum. Could not find appendix and thought best not to subject patient at present stage to the extensive tearing of adhesions which its search would have necessitated. Tampon of gauze.	Appendix not found; no concretion.	R.	On April 1 temperature went up and pain returning necessitating the introduction of the finger into the wound which was followed by an escape of pus. Wound healed in September.
XV. A. W. M.	Ger. 40 male.	Dr. A. O. Huntley, N. Bloomfield, Ohio.	Lake-side Hospital, March 20, 1894.	During quiescent stage.	1st attack 9 years ago. 2d attack in Mar., '93. 3d attack Sept., '93; not able to do any work since.	Over caecum.	Pain during attacks. Since last attack in Sept., '93, has had continual tenderness, aggravated by slightest exertion.	Tenderness and resistance on deep pressure; no dullness.	Appendix on anterior surface of caecum, no adhesions. Amputated and sewed with gauze.	Appendix bent at right angles about middle and was impervious in distal portion. Catarrhal condition of mucous membrane; no concretion.	R.	Uninterrupted recovery; wound healed by first intention. Patient left hospital 30 days after operation.

XVI.	Ger. 30 male.	Dr. J. H. Lueke.	Lakeside Hospital, April 26, 1894.	Attacks during an attack. two years.	Over caecum.	Of late has constant pain in region of caecum so that he is unable to do any work.	Extensive in- duration and quillness reach- ing to McBurn- ey's point.	Omentum and caecum in a mass of adhesions. Appendix situated at lower end and under sur- face of caecum and com- pletely occluded at its base. Coats greatly thickened by chronic in- flammation.	R.	Uninterrupted re- covery; left hos- pital May 26.
XVII.	Am. 27 male.	Patient a resident of Cleveland.	Lakeside Hospital, May 2, 1894.	Attacks during a period of 17 years. Operated in 1890.	Over caecum.	Constant tender- ness and pain; quite severe just before discharge of pus.	Cicatrices and fistula remain- ing from opera- tion 4 years pre- vious. Fistula closes and opens with a slight dis- charge of pus about every six weeks. Indura- tion and dullness in caecal region.	Traced fistula down to the appendix which lay two parts. Dis- sected behind and to outer sur- face of caecum. Sewed about one inch from opening in caecum with long, greatly absorbent catgut. Operation very thickened, ul- cerated and difficult be- cause of pus. Cause of extensive adhe- sions remaining and about every six weeks. Indura- tion and dullness a solid mass. Gauze tampon.	R.	Patient steadily improving; sinus still discharges; left hospital May 26.
XVIII.	Ger. 25 male.	Dr. C. A. Hamann.	Lakeside Hospital, May 3, 1891.	Attacks during period of two years.	Over caecum.	No dullness. Could feel what seemed to be a thickened appendix.	Incision through skin and external oblique parallel to fibres of dead external oblique; divided internal oblique paral- lel to its fibres; and transversalis and part of caecum parallel to skin incision. Appendix lay ante- riorly; adherent to caecum by dense adhe- sions. Antistated and sweated with catgut. Lay- ers of abdominal wound stitched with catgut.	Appendix greatly swollen and completely occluded at its base. Coats greatly thickened by chronic in- flammation.	R.	Patient made an uninterrupted re- covery; left hos- pital May 29.

APPENDICITIS—(ACUTE CASES.)

No.	Nat. age, sex.	In consultation with	Place and date of operation.	Stage in which operated.	History of previous attacks.	Incision.	Subjective symptoms.	Objective symptoms.	Operation.	Appendix and concretion.	Result.	Remarks.
XIX.	Am. 25 male.	Dr. H. Wilson, Oberlin, Ohio.	Residence, June 16, 1893.	Acute. 6 days.	None.	Over cæcum.	General abdominal pain, becoming localized on third day.	Tympanic; tenderness and fullness over cæcum and distention.	Found abscess containing several ounces of pus; amputated appendix but base was so gangrenous that it could not be stitched, and was simply tied. Tampon of gauze.	Appendix gangrenous about middle; no concretion.	R.	Uninterrupted recovery. Wound entirely healed in about seven weeks.
XX.	Am. 7 female.	Drs. J. E. Darby, G. C. Ashmun, and H. K. Cushing.	Residence, June 18, 1893.	Acute. 6 days.	None.	Over cæcum.	Pain behind crest of ileum extending upward toward kidney and liver.	Dullness over cæcum. Nothing to be felt.	Appendix full of a soft material; did not present appearance of inflammation; amputated and sewed with catgut. Appendix lay anteriorly and was provided backward below the cæcum.	Appendix 4/5 inches long. Contained a small concretion.	R.	Uninterrupted recovery. Wound healed by first incision; no further trouble, and now in excellent health.
XXI.	Am. 16 male.	Dr. H. Wilson, Oberlin, Ohio.	Residence, July 1, 1893.	Acute. 6 days.	None.	Over cæcum.	General pain, becoming localized on second day.	Tympanic; dullness and tenderness over cæcum; great pain on pressure.	Found abscess between cæcum and pelvic wall containing several ounces of pus. Appendix lay on anterior surface; amputated but could only draw base together lightly with catgut, as base was so softened. Tampon of gauze.	Appendix gangrenous; large and gangrenous; near base; no concretion.	R.	Uninterrupted recovery. Wound discharged profusely for a time, but healed entirely in about two months.

XXII	A. L.	Am.	Dr. H. Wilson, Oberlin, Ohio.	Residence, Ang. 24, 1883.	Acute. 8 days.	None.	Over caecum.	(general pain localized on second day.) Moderate tympanities. Slight resistance in region of caecum. Most marked above ileo-um-branch the umbilical line. Pain on pressure.	Abscess containing several ounces of pus. Appendix tore from gangrenous caecum and could not reach the base. Tampon iodiform gauze.	R.	Wound discharged profusely. Patient recovered completely.
XXIII	J. A. H.	Am.	Drs. A. O. Spence and G. C. Ashmun.	Charity Hospital, Aug. 25, 1883.	Acute. 18 days.	None.	Over caecum.	Taken with pain in umbilical region. More or less soreness over entire abdomen. Pain finally became localized over caecum.	Caecum and omentum in mass of adhesions and containing appendix, and a few drachms of pus. Tissues were so disorganized that opening shreds remain-into caecum could not be closed with sutures. Gauze tampon.	R.	Uninterrupted recovery. Left hospital 31 days after operation.
XXIV.	F. S.	Ger.	Dr. G. A. Orwig.	Lakeside Hospital, Oct. 20, 1883.	Acute. 6 days.	None.	Over caecum.	General abdominal pain, becoming localized on day before operation at point on McBurney's point.	Abscess containing $\frac{1}{2}$ pint pus. Appendix on anterior surface of caecum. Impacted gall-stone (great but could not saw stump) and perforated because tissues were under sutures. Gauze tampon.	R.	Profuse discharge. Patient allowed to get up middle of Dec. Went home in Jan. Wound entirely healed in Feb.

APPENDICITIS.—(ACUTE CASES.)

No.	Nat., age, sex.	In consultation with	Place and date of operation.	Stage in which operated.	History of previous attacks.	Incision.	Subjective symptoms.	Objective symptoms.	Operation.	Appendix and concretions.	Result	Remarks.
XXV. R. A.	Am. 20 male.	Dr. F. W. Upton, Conneaut, Ohio.	Residence, Jan. 10, 1894.	Acute, 10 days.	None.	Over caecum.	Cramps in abdomen; became localized on third day to region of caecum.	Distinct dullness and tenderness over caecum. Tender on pressure.	Opened abscess containing $\frac{1}{2}$ pint pus. During irrigation appendix floated out, having become entirely detached. No pus found. Opening in caecum not found. (Gauze tampon.)	Appendix granular and greasy and entirely detached. No concretions.	R.	Uninterrupted recovery.
XXVI. G. B.	Irish. 17 male.	Dr. A. J. Cook.	Lakeside Hospital, Jan. 19, 1894.	Acute, 8 days.	None.	Over caecum.	General pain; localized on second day.	Indurated mass and dullness over caecum. Pain very acute.	Abscess containing several ounces of pus. Appendix not found. (Gauze tampon.)	Appendix not found. No concretions.	R.	Free discharge for three weeks. Patient left hospital eight weeks after operation; entirely healed fourteen weeks after operation. No induration or tenderness remaining.
XXVII E. J	Am. 19 female.	Dr. P. H. Sawyer.	Residence, Feb. 1, 1894.	Acute, 20 days.	None.	Over caecum.	General abdominal pain; becoming localized on second day.	Some tympanites. Extensive induration and tenderness, especially and upward toward liver.	Abscess between caecum and pelvic wall containing small amount of pus. Appendix to outer surface of caecum. Amputated and attempted sawing with caliper but tissues tore under sutures. Gauze tampon.	Appendix ulcerated and perforated about the middle. No concretions.	R.	Profuse suppuration. Appendix removed $\frac{1}{2}$ quart serum from left pleural cavity. Patient steadily improving, but still discharges slightly.

XXVIII	Ger.	Dr. F. H. Acker.	Lakeside Hospital, Feb. 10, 1894.	Acute, 5 days.	None.	Over caecum.	General abdominal pain; localized on second day.	Extensive dullness and induration over caecum and extending toward liver. McBurney's point. Great felt pulsating at bottom of cavity. Tampoon of gauze.	Abscess containing ½ pint of pus extending behind caecum and pushing its way upward toward liver. McBurney's iliac artery could be felt pulsating at bottom of cavity. Tampoon of gauze.	Appendix not found.	Wound healed in seven weeks, then opened and continued discharge; Dilated sinus and removed a concretion size of a pea. Wound closed again and patient since remained perfectly well.
XXIX.	Ger.	Drs. C. Baker and W. H. Humiston.	Residence, March 27, 1894.	Acute, 8 days.	None.	Over caecum.	General abdominal pain; localized on second day.	Marked induration and dullness over caecum. Tender on pressure.	Caecum adherent to abdominal wall. Abscess between caecum and pelvic wall and dissection post morily. Could not find appendix. Tampoon of gauze.	Appendix not found.	Uninterrupted recovery. Small point of granulation remaining in cloth after operation, operated by Dr. Nevison.
XXX.	Eng.	Dr. J. E. Darby.	Lakeside Hospital, May 3, 1894.	Acute, 17 days.	None.	Over caecum.	General abdominal pain, becoming localized on third day.	Induration and dullness extending to McBurney's point.	Abscess behind caecum dissecting downward toward pelvis and also inward toward liver. Sewed opening in caecum with catgut. Gauze tampon.	Only a few shreds of appendix remaining.	Uninterrupted recovery; left hospital May 30.

REMARKS ON APPENDICITIS.

The foregoing tables include 30 operations for appendicitis, with one death. The cause of death being from general infection with metastatic abscess of the parotid. 18 cases were chronic and 12 acute. 7 of the chronic cases were operated during an attack, and 11 in the quiescent stage. 3 cases had been previously operated during an attack, when, owing to their condition, it was not thought wise to prolong the operation, and the appendix was not found. In these cases, a sinus remaining, a second operation was performed and the appendix removed.

The incision was made over the caecum in 28 cases, in one case through the *linia semilunaris*, and in the other through the median line. In one case the layers of the abdominal muscles were divided parallel to their fibres.

In three cases concretions were found at the time of the operation, and in a fourth case a concretion was removed from a sinus, remaining several weeks after the operation. In five cases the appendix was not found, in eleven the mucous membrane was ulcerated or there were strictures remaining from previous ulcerations. In four cases there was a catarrhal condition of the mucous membrane, in five the appendix was gangrenous, and the opening in the caecum could not be closed with sutures. In four cases nothing remained of the appendix but a few shreds. In one case the appendix presented only slight evidences of inflammation, but was unusually long and contained a concretion.

In seven cases the abdomen was closed without drainage; in the remaining cases tampons of iodoform gauze were used. Two cases still have sinuses, which give little trouble except from time to time when they close superficially, and there is a slight retention of pus. In three cases slight hernia have occurred since the operation.

The following cases are reviewed somewhat in detail in order to call attention to some of the more interesting facts.

CASES II and IV^t. Operations had been performed several

months previous, when, owing to the condition of the patient, it was not thought best to prolong the operation, and the appendix was not found. In these cases sinuses remained which gave little trouble, excepting when the opening became occluded, and there would be retention of secretion. At the secondary operation the appendix was found, and the opening into the caecum closed. Both cases made complete recoveries.

CASE IX. Was taken sick June 11, 1893, with typical symptoms of appendicitis. Dr. Allen was called in consultation June 18th. The acute symptoms had at that time subsided and an operation was not advised. July 28, had second attack. Was sick in bed about two weeks. During this time Dr. Allen was called a second time, and advised an operation as soon as the acute symptoms should subside. The third attack occurred September 3, and the patient was seen for the third time, and operation strongly advised. This, however, was not permitted until after the seventh attack, which occurred November 28, and on December 2 the operation was performed with antiseptic precautions. The caecum and omentum were in a mass of adhesions, and only a few shreds of the appendix could be found. The opening into the caecum was sewed with cat-gut, and the cavity packed with iodoform gauze. The patient seemingly did well for about a week, although there was profuse discharge. On December 8 swelling of the left parotid gland was noticed, accompanied by a rise of temperature, The swelling increasing, an incision was made on December 10. No abscess had as yet formed, but minute points of suppuration could be seen throughout the gland. The patient gradually failed and died one week later.

CASE X In July 1892, had first attack, with localized symptoms. September, 1892, second attack. Numerous slight attacks occurred from four to six weeks apart until July 8, 1893, when the patient was confined to the house about four weeks. In October, 1893, first saw the patient in consultation, and advised an operation at once. A few days later the patient was seen by another surgeon of

the city, who thought the trouble was not appendicitis, and that it could be cured by a slight rectal operation. His advice was followed and the patient was treated for several weeks at a hospital in the city, and was discharged November 27, and told that he was cured, although, on his return home it became evident that his condition was one of extreme gravity. On November 30, patient was taken with severe pain, Dr. Stevenson was called and found him in profound collapse. Dr. Orwig also saw the patient in consultation, but he did not rally sufficiently for several days to even consider the possibility of an operation. On December 4, Dr. Allen was again called, and found the patient suffering extreme general abdominal pain with tympanites, no localized tenderness, and presenting the appearances of one suffering from intestinal obstruction. The family urged an operation at all hazards, and the patient was removed to Charity Hospital. Having seen the patient previously and having made a diagnosis of appendicitis, the doctor felt so positive of the cause of the trouble, that the incision was made over the cæcum. Some adhesions were found between the omentum and intestines. The appendix was $4\frac{1}{2}$ inches long, and wrapped around the cæcum just above the entrance of the ileum, thus forming an occlusion of the bowel. The appendix was detached, amputated, and the opening closed with cat-gut.

The operation was rapidly performed, owing to the weak condition of the patient, and stimulants were given during the operation. For about a week after the operation the temperature was sub-normal, and the patient required most vigorous stimulation. The tympanites did not entirely disappear until about the sixth day. The patient had two relapses owing to indiscretions in diet. He, however, made a good recovery, and is now entirely well, with the exception of a slight hernia probably due to distention caused by extreme tympanites.

CASE XVII. Had first attack of appendicitis in 1877, and during the years following until 1890 had attacks varying in frequency

from three weeks to six months. Was operated on by Dr. Allen, February 8, 1890. A circumscribed abscess was opened and drained, but the appendix could not be found. The patient improved but a sinus remained, which from time to time would close, causing retention of pus with fever and localized tenderness. This was relieved as soon as the discharge would take place. A second operation was performed May 2, 1894. The sinus was followed down to the appendix, which lay posterior and to the outer surface of the cæcum. The operation was long and exceedingly difficult, owing to the dense cicatricial tissue surrounding the cæcum. A small sinus still remains but the discharge is considerably lessened, and there have been no relapses.

CASE XX. Was taken sick June 12, 1893. Had slight abdominal pain which became localized June 14. Dr. Allen saw patient June 17. There was slight tenderness over cæcum. Temp. 102. Pulse ranging from 112 to 120. The following day the general condition being much worse it was decided to operate. The appendix was $4\frac{1}{2}$ inches long, and curved backward behind the cæcum. It did not present appearances of inflammation, but was filled with a mucoid material, and contained a small concretion. The abdominal wound was closed without drainage. All symptoms abated at once. The wound healed by first intention, and the patient is entirely well.

CASE XXV. This case was peculiar owing to the complete detachment of the appendix, which was floating free in the abscess cavity, and washed out during the irrigation.

OPERATIONS FOR SALPINGITIS AND OÖPHORITIS.

No.	Nat., age, social condition.	In consultation with	Date and place of operation.	History of patient.	Examination.	Operation.	After treatment.	Irrigation and drainage.	Result.	Remarks.
I E. P.	Am. 42 single.	Dr. F. W. Upson, Conneaut, Ohio.	Lakeside Hospital, June 21, 1893.	Healthy; menstruated at 14; regular; always had severe pain at monthly periods; during last year and a half been unable to do any work; in bed a few weeks then around for a time; in Dec., '92, Dr. Upson opened an abscess through vagina; discharged two months; pain continues more severe at periods which occur every 3 weeks.	General health poor; in duration and extreme tenderness on both sides of uterus; no fever.	Ovaries and tubes inflamed and adherent; were removed and pedicles ligated with silk; abdominal wound closed with silk worm gut sutures.	Patient did well for 4 days then temperature went up, and death followed on 8th day. There were movements of bowels on 3d, 4th and 6th days, no local signs of peritonitis.	No Irrigation, no drainage.	Death on 8th day from peri- tonitis.	Autopsy showed septic peritonitis.
II F. S.	Ger. 21 mar.	Patient resident of Cleveland.	Lakeside Hospital, July 3, 1893.	Healthy; menstruated at 14; regular; when 16 yrs. of age strained herself while lifting, and since then has had severe pain at periods; married at 19; never pregnant; periods occur every 3 weeks; great pain; unable to attend to household duties.	Enlarged tubes and tender ovaries to be felt; uterus in normal position.	Tubes enlarged; ovaries in slight adhesions; were removed and pedicles ligated with silk; pedicles very broad and ligatures were anchored with cat gut; abdominal wound closed with silk worm gut sutures.	Sutures removed on 7th day. Had no bad symptoms of any kind; left hospital August 10th.	Irrigation, no drainage.	R.	Patient has had excellent health since operation.
III M. T.	Am. 25 single.	Patient resident of Cleveland.	Charity Hospital, July 11, 1893.	Healthy; menstruated at 18; regular; aborted at about 6th week on May 30, '94; developed pelvic peritonitis; pain continued and patient unable to get around; entered hospital June 29.	Indurations on both sides of uterus; extremely tender to slightest pressure.	Removed enlarged tubes and ovaries; tubes filled with pus, and ruptured while tearing from their adhesions; ovaries inflamed and in a mass of adherent omentum; pedicles ligated with silk.	Tube removed on 3d day; patient did well until 5th day, when she attempted to help herself by reaching to floor and lifting heavy wash bowl; taken with severe abdominal pain, temperature went to 102; pulse 130; was in bad shape for a couple of days; gradually improved; wound entirely healed 6 weeks after operation.	Irrigation, glass drainage tube.	R.	Complete recovery.

IV. E. H.	Am. 31 mar.	Patient from Copopa, Ohio.	Lakeside Hospital, July 24, 1893.	Always delicate; menstruated at 14; irregular and pain; periods every two or three weeks; normal amount. Married at 23; never pregnant; during last 4 years has been in bed most of time; very nervous.	Tender ovaries to be felt; uterus normal.	Removed tubes and ovaries, which were inflamed; pedicles ligated with silk; abdominal wound closed with silk-worm gut sutures.	Stitches removed on 8th day; wound healed by first intention; left hospital August 22.	No irrigation, no drainage.	R	Patient in excellent health.
V. J. S.	Am. 24 single.	Dr. G. S. Lauter- man, Bellevue, Ohio.	Charity Hospital, July 29, 1893.	Healthy; menstruated at 17; always irregular and scanty; about three years ago took cold while menstruating; has since had almost continual pain in pelvis, much worse during periods; confined to bed a good share of the time.	Enlargements to be felt on both sides of uterus; more tender on left side.	Tubes inflamed; ovaries cystic degenerated and adherent; were removed with silk; abdominal wound closed with silk-worm gut sutures.	Patient developed severe cystitis; slow convalescence; was exceedingly nervous and did not entirely recover until nearly a year after the operation.	No irrigation, no drainage.	R	Patient now in good health.
VI. K. C.	Am. 23 mar.	Patient resident of Cleveland.	Charity Hospital, Sept. 30, 1893.	Healthy; menstruated at 15; irregular; pain; noted abortion on her self in March '88 and again in August '88; portion of placenta retained and did not come away until December '88; had fever and pelvic pain; especially at periods; was confined to bed a good share of time.	Indurated masses on both sides of uterus; very tender.	Tubes and ovaries in dense adhesions; pedicles ligated with silk and removed with cautery; abdominal cavity protected from infection during removal by gauze pads.	Tampon removed on 5th day; made unimpacted recovery; left hospital November 29.	No irrigation; Mikulicz tampon.	R	Operated by Dr. Pozzi, at a clinic.

OPERATIONS FOR SALPINGITIS AND OOPHORITIS.

No.	Nat., age, social condition.	In consultation with	Place and date of operation.	History of patient.	Examination.	Operation.	After treatment.	Irrigation and drainage.	Result.	Remarks.
VII.	Amer. 26 sing.	Dr. T. W. Walker, Stenben-ville, Ohio.	Charity Hospital, Oct. 25, 1893.	Healthy; menstruated at 15; was regular for a year then commenced having pain, more severe at periods; during last 3 years been confined to bed most of time; extremely nervous.	Examination under either showed enlargement of ovaries.	Ovaries and tubes in ad- hesions, ovaries cystic degenerated; pedicles ligated with silk and stumps cauterized; closed wound with silk worm gut sutures.	Had hysterical attack on 6th day and threw herself around the bed but caused no harm to wound; temperature never went above 100; had several nerv- ously attacks but grad- ually became less severe and ceased ear- tively.	No irrigation, no drainage.	R.	Heard from patient one year after operation, in excellent health.
VIII.	Amer. 29 mar.	Dr. G. S. Lanter- man, Bellevue, Ohio.	Charity Hospital, Oct. 31, 1893.	Healthy; menstruated at 12, regular; two child- ren, no trouble follow- ing confinements; mis- carried two months ago and followed by pelvic inflammation; had fever and great pain; been confined to bed most of time.	Enlarged and extreme- ly tender masses at sides of uterus.	Ovaries and tubes in dense adhesions; in re- moving left ovary the sigmoid was closely ad- herent and was opened; opening lamed a tely disinfected and closed with cat-gut sutures; petioles were ligated with silk.	Patient in severe shock at close of operation and did not fully react until the following day; bowels moved without cathartics on third day; tampon re- moved on fourth day; made a rapid recovery without any complica- tions.	Irrigation; Mikulicz tampon.	R.	Saw patient in July '94, in excellent health.
IX.	Amer. 38 mar.	Dr. G. E. Webster, Kingsville, Ohio.	Lakeside Hospital, Nov. 14, 1893.	Healthy; menstruated at 13, regular but always had pain; married at 22; first child at 24; mis- carried at fifth month at 23, second child at 31; hard labor; never so well since. Had discharge from uterus and patient was twice confined. Had great pain at periods and was confined to bed most of time.	Uterus somewhat en- larged; indurated masses at sides.	Dense adhesions around tubes and ovaries which were removed and pedi- cles ligated with silk; adhesions continued to bleed and glass drain- age tube was carried down to pelvis.	Syringed tube frequent- ly; gave vigorous stim- ulation; on third day tampon removed and pulse went up, intro- duced flinger into pelvis and washed out quantities of broken down clots; patient improved slowly; left hospital Feb. 2, '94.	Irrigation; glass drainage tube.	R.	In June '94 had a flow resembling menstrual discharge; patient is able to be around but still has pain.

X. R. C. R.	30 mar.	Color'd resident of Cleveland.	Lakeside Hospital, Aug. 16, 1893.	Healthy; menstruated at 17, regular; no pain; married at 24; never pregnant; since marriage had pain at periods, so severe of late that patient was unable to attend to any household duties.	Dense induration around uterus; nothing definite to be felt; very tender.	Uterus and tubes in a dense mass of adhesions; tubes and ovaries removed with great difficulty; irrigated and closed abdomen with silk worm gut sutures.	Patient very weak after operation; had great tenderness over entire abdomen; pulse and temperature went up and patient gradually failed.	Irrigation, no drainage.	Death on 5th day from peritonitis.	Autopsy showed an accumulation of blood in pelvis.
XI. E. S.	36 mar.	Amer. Dickson, Ashtabula, Ohio.	Lakeside Hospital, Nov. 29, 1893.	Never healthy; menstruated at 16, regular; has four children, the youngest 8 years of age; had operation for hemorrhoids 2 years ago; has never been well since birth of last child; within last two years has been confined to bed most of time; extreme pain at periods and discharge of pus at times.	Uterus prolapsed tenderness on both sides; of uterus.	Tubes and ovaries inflamed, were removed and pedicles ligated with silk; fundus of uterus stitched in abdominal wound with silk-worm gut.	Had attack of bronchitis during second week; had irritable stomach and very hard to take much nourishment.	No irrigation, no drainage.	R.	Patient slowly but steadily improving.
XII. M. R.	35 single.	Ger. Dr. G. T. Gregg, Sullivan, Ohio.	Charity Hospital, Jan. 13, 1894.	Healthy; menstruated at 12, regular, no pain; six years ago strained herself while lifting, since then has pain at periods and loses considerable blood; steadily getting worse until now unable to do any work.	Induration at sides of uterus; very tender on pressure.	Tubes and ovaries enlarged and in mass of adhesions; were removed and pedicles ligated with silk.	Second day noticed swelling of left parotid; 3d day well marked erysipelas around left ear; tampon removed on 5th day; inflammation extended over entire face; patient had high fever with delirium; abdominal wound at no time showed any symptoms of infection.	Irrigation; Mikulicz tampon.	R.	Patient made complete recovery. Case given in detail below.

OPERATIONS FOR SALPINGITIS AND OÖPHORITIS.

N. o.	Nat. age, social condition.	In consultation with	Place and date of operation.	History of patient.	Examination.	Operation.	After treatment.	Irrigation and drainage.	Result.	Remarks.
XIII.	Am. 30 mar.	Dr. C. S. Ward, Warren, Ohio.	Residence, Feb. 2, 1894.	Healthy; menstruated at 12, regular; married at 14; 1st child at 17; had 5 children, twins 7 years ago; had 3 miscarriages, the last in April, '93, Jan. 12, '94, commenced flowing; continued 10 days; was curried; no pain for few days then flowed again. Dr. Ward called to case Feb. 1, temperature 102, great tenderness especially on left side.	Abdomen distended; induration and dullness over lower portion; extremely tender.	Opened into an abscess on left side; right tube and ovary enlarged and inflamed, were removed; packed wound with gauze strips.	Tampon removed on 5th day; had no temperature after operation; made an uninterrupted recovery.	Irrigation, gauze tampon.	R.	Patient in excellent health.
XIV.	Am. 23 mar.	Dr. H. J. Burdick.	Lakeside Hospital, Feb. 6, 1894.	Healthy; menstruated at 11, regular; married at 16; child at 17; had miscarriage at 3d month in Jan. '93, never fully recovered; had discharge from uterus; Dr. Burdick twice curried with temporary improvement; not able to attend to household duties; slightest exertion brings on pain.	Induration at sides of uterus; more extensive on left side.	Ovaries cystic degenerated, tubes inflamed, cecæ ligated with silk; abdominal wound closed with silk worm gut sutures.	Made an uninterrupted recovery without any complication.	No irrigation, no drainage.	R.	Complete recovery.
XV.	Am. 28 mar.	Patient from Elyria, Ohio.	Lakeside Hospital, Feb. 23, 1894.	Healthy; menstruated at 15, never regular, had great pain; married at 19; 1st child at 22; 2d child at 25; miscarried in Nov., '92; never so well since; in Feb., '93, had attack severe pain in pelvis, thought it came from over exertion; unable to attend to any duties since.	Patient very nervous and tender; nothing to be felt distinctly.	Free serum in abdominal cavity; entire peritoneum studded with small white bodies size of a pin head; ovaries and tubes inflamed and adherent; removed and pedicles ligated with silk.	Extremely nervous and hard to manage; tampon removed on 4th day; wound healed rapidly; went home April 3.	Irrigation; Mikulicz tampon.	R.	Patient had several nervous attacks but slowly improved.

XVI.	J. P.	Am. 40 mar.	Dr. T. M. Sabine, Warren, Ohio.	Residence, Dec. 20, 1893.	<p>Healthy; never pregnant; in Oct., '93, noticed enlargement in pelvis; increased slowly in size; Dec. 16 taken with pain and confined to bed; temperature 100 to 103; Dec. 19 enlargements to be distinctly felt on both sides; had chills during night.</p>	<p>Abdomen tympanitic; free fluid in abdominal cavity; nothing could be distinctly felt.</p>	<p>On opening abdomen considerable free pus escaped; tubes were about the size of bananas, and had ruptured shortly before the operation; ovaries enlarged; only slight adhesions; tubes and pedicles removed and pedicles ligated with silk; freely irrigated abdominal cavity.</p>	<p>Tampoon removed on 3d day; patient made rapid recovery.</p>	<p>Irrigation, Mikulicz tampoon.</p>	<p>R.</p>	<p>In Feb., '94, one of silk ligatures was discharged through sinus; patient eventually healed.</p> <p>Case given in detail below.</p>
XVII.	I. N.	Am. 36 mar.	Dr. M. F. Miller, Wadsworth, Ohio.	Charity Hospital, Mar. 2, 1894.	<p>Always delicate; menstruated at 13, regular; pain; married at 21; 3 children, ages 10, 12 and 14 yrs.; no miscarriages; since last confinement never been so well; had severe pain at uterus in May, '93, better for a time; during last year unable to attend to any duties; excessive flow with pain.</p>	<p>Small fibroid in uterus; tubes and ovaries inflamed and bound by adhesions; were removed and pedicles ligated with silk; abdominal wound closed with silk worm gut.</p>	<p>Patient did well for a few days then developed abscess around pedicles, discharged through abdominal wound; patient had rise of temperature from time to time with extreme pelvic pain; May 1st detached sinus and removed silk ligature from pedicle; patient slowly improved.</p>	<p>Irrigation, no drainage.</p>	<p>R.</p>	<p>Heard from patient in Aug., '94, was slowly but steadily improving, only small sinus remaining.</p>	
XVIII.	L. P.	Am. 36 mar.	Dr. W. W. Holliday.	Lakeside Hospital, Mar. 12, 1894.	<p>Healthy; menstruated at 13, irregular; married at 18; child at 20; miscarriage at 4th month from a fall at 27; never so well since; has bearing down pains when moving about; unable to attend to any duties; has had discharge of pus on various occasions from vagina.</p>	<p>Tubes and ovaries in most dense mass of adhesions; ligated pedicles with silk; torn adhesions bled profusely, and were controlled by a Mikulicz tampon tightly packed.</p>	<p>Patient in extreme shock and did not fully react until following day; had severe cystitis during convalescence; left hospital April 27.</p>	<p>Irrigation, Mikulicz tampoon.</p>	<p>R.</p>	<p>Made complete recovery.</p>	

OPERATIONS FOR SALPINGITIS AND OOPHORITIS.

No.	Nat., age, social condition.	In consultation with	Place and date of operation	History of patient.	Examination.	Operation.	After treatment.	Irrigation and drainage.	Result.	Remarks.
XIX.	Am. 29 single.	Dr. F. S. Jones, Medina, Ohio.	Lakeside Hospital, March 12, 1894.	Healthy; menstruated at 18; regular, but considerable pain; during last 8 years patient has been getting worse, and her periods of menses were the necessary to control the spasms; patient of late confined to bed, unable to attend to any duties; very nervous.	Nothing to be felt distinctly; great pain in region of ovaries.	Ovaries inflamed; right ovary cystic degenerated; tubes apparently normal; were removed with ovaries and pedicles ligated with silk; closed abdominal wound with silkworm gut.	Stitches removed on eighth day; wound healed by first intention; uninterrupted recovery. Left hospital, April 16.	No irrigation, no drainage.	R	Saw patient in August '94, in excellent health; had no attacks since operation.
X X.	Am. 32 mar.	Dr. W. G. Smith, Ravenna, Ohio.	Charity Hospital, March 14, 1894.	Always delicate; menstruated at 18; regular, scanty; married at 22; first child at 23, second at 25; had miscarriage at fourth month at 27, caused by a fall; third child at 29; since last confinement never been so well.	Uterus in a dense mass of adhesions; nothing to be felt distinctly; great pain on slightest pressure.	Tubes and ovaries fall of pus; ligature on right pedicle cut through soft; mass and could not be tied; left pedicle ligated with silk; abdominal wound not sutured.	Patient in bad shape 5 or 6 days after operation; freely stimulated; made complete recovery.	Irrigation; Mikulicz tampon.	R	Case given in detail at end of tables.
X X I.	Am. 26 mar.	Dr. F. L. Thompson, son.	Charity Hospital, April 9, 1894.	Never healthy; menstruated at 13; regular; no pain; married at 23; child at 24; miscarried in June, '88, brought on by a fall; made good recovery. In January, '94, took cold while menstruating, fever, chills, and pelvic pain; did not improve and confined to bed entire time.	Indurations at sides of uterus; very tender.	Tubes and ovaries enlarged and contained pus; very dense adhesions; ligated pedicles with silk; considerable hemorrhage from torn adhesions; irrigated and made pressure with tampon; silkworm gut sutures.	In extreme shock after operation; was stimulated but did not throb; oughty react until the following day; tampon removed on fifth day; stitches removed on eleven; day; made uninterrupted recovery.	Irrigation; Mikulicz tampon.	R	Went home in ambulance in 4 days after operation; made rapid recovery.

REMARKS ON OÖPHORECTOMY AND SALPINGECTOMY CASES.

The preceding tables include twenty-three cases with three deaths, two deaths being from peritonitis, and one from shock. In ten cases the abdomen was closed without drainage, in three cases a glass drainage tube was used, and in the remaining ten a Mikulicz tampon was introduced. The latter was especially servicable in cases followed by considerable oozing from torn adhesions.

CASE VI. Was operated by Dr. Pozzi, of Paris, at a complimentary clinic given him while visiting in the city. The case was unusually difficult owing to the dense adhesions following the long continued inflammation.

CASE IX. Patient was in considerable shock and freely stimulated. Considerable oozing continued and glass drainage tube was syringed frequently; the temperature gradually went up and on third day patient was in bad shape; the tube was removed, a finger introduced into pelvis and a quantity of broken down blood clot removed and the cavity flushed with water. From this on the patient commenced to improve slowly, but was not able to return home until February 2. The sinus continued to discharge and there was pain in pelvis which was aggravated by any exertion. In April, 1894, one ligature came away. In²July patient returned to Cleveland and the sinus was dilated with tents. In September, 1894 the second ligature came away, this has been followed by a decrease in amount of discharge and a general improvement in the patient.

CASE XII. Patient went along nicely for two days, when a swelling of left parotid gland was noticed, on third day there was a well-marked erysipelas, commencing around the left ear. The inflammation gradually extended over the entire face. On the fifth day the tampon was removed. The patient had a high fever and was delirious, but the greatest care was exercised while dressing the abdominal wound in order that it might not become infected. The inflammation of the face gradually subsided, and the patient made a good recovery without any infection of the abdomen.

CASE XVI. The patient discovered an abdominal growth in October, '93, but it was thought to be a fibroid, rather than of an inflammatory nature. On December 16 she was suddenly taken with pain, and the temperature went to 103. On December 19 distinct enlargement could be felt in the region of the tubes. On the morning of December 20, Dr. Allen was called in consultation, but could not feel any tumors. The patient in the meantime had had chills and the temperature was increasing. It was decided to operate at once. On opening the abdomen a considerable amount of free pus escaped. Both tubes were found greatly enlarged and ruptured. The ruptures having taken place during the night, thus explaining the reason that they could not be felt just before the operation. The abdomen was freely flushed with water, and a Mikulicz tampon introduced. The temperature at once came down and the patient made a rapid recovery.

CASE XX. After last confinement, three years ago, had pelvic inflammation and never recovered her former health. In April, '93, attempted to assist in house-cleaning and was taken with severe pain in pelvis, with chills and fever. In October, '93, abscess broke into the bladder, and two weeks later into the rectum.

From time to time the discharge would cease, when the pain would become more severe and temperature would go up. Patient confined to bed all winter, and pain was so severe that on an average of 2 grains of morphia were required daily to give relief. Patient was brought to Cleveland in February, '94, and an attempt was made to build her up somewhat for operation. At the operation the tubes and ovaries were found in a mass of adhesions and full of pus, and the right pedicle was so softened that the ligature cut through and could not be tied. Left pedicle ligated with silk. Abdomen was irrigated and a Mikulicz introduced and tightly packed to make pressure on the bleeding surface; abdominal wound was not sutured. Patient was in profound shock at close of operation; vigorous stimulation was employed without any apparent

improvement. On second day the gauze strips were removed from tampon and the patient was in such a low condition that it became necessary to employ rectal stimulation in addition to hypodermics ; nothing could be retained by stomach. Urine and portions of the rectal injections came through the abdominal opening. On the third day introduced catheter into bladder to ensure continual drainage. Patient was unconscious, temperature below normal, and only at times could any pulse be felt at the wrist. On fourth day there was slight improvement, enough to warrant removal of handkerchief and flushing of cavity on the fifth day. Patient gradually improved ; in April the silk ligature came away ; wound closed rapidly ; went home May 1, and was entirely healed a couple of weeks later. Has gained flesh and is perfectly well.

CASE XXIII. Was a parallel case with the preceding. Five years ago had a miscarriage, followed by pelvic inflammation with chills and fever. Never fully regained health, but was able to be around until about one and one-half years ago. About this time an abscess discharged into the rectum. Patient was in bed most of time, and required continual use of opiates. At the operation the right ovary and tube were full of abscesses, and nothing remained of left ovary but a few shreds of tissue. Abdomen irrigated and Mikulicz introduced. Patient in extreme shock. Was freely stimulated but never reacted, and died 48 hours after the operation.

OVARIOTOMIES.

No.	Nat., age, social condition.	Patient sent by.	Place and date of operation.	History of patient.	Examination.	Operation.	After treatment.	Irrigation and drainage.	Result.	Remarks.
I. L. F.	Col. 32 mar.	Patient from Lorain, Ohio.	Lakeside Hospital, May 1, 1893.	Healthy; menstruated at 16; regular; married at 22; three children; last child in August, '91; never been well since; periods every three weeks; pain in left iliac region; has continual bearing down feeling.	Uterus normal size; crowded over to right side by a mass in left pelvis; tumor hard and tense; fluctuation indistinct; slight tenderness on right side; general health good.	Removed unilocular cyst of left ovary; size of two fists; fluid clear, sac very tense; abdominal incision closed with silk-worm gut sutures.	First dressing on ninth day; stitches removed; wound healed; seventh day developed phlebitis of left leg; patient went home May 31.	No Irrigation, no drainage.	R	Had some swelling of leg for a time; complete recovery.
II. B. P.	Am. 24 single.	Dr. N. M. Jones.	Charity Hospital, Nov. 6, 1893.	Healthy; menstruated at 14; irregular; in December, '92, noticed that dresses were tight; during Summer, '93, noticed tumor in left iliac region; grew steadily; some pain, especially at periods.	Uterus normal size; fluctuating tumor reaching nearly to umbilicus; quite movable; general health good.	Removed multilocular cyst of left ovary; clear fluid; no adhesions; right ovary cystic degenerated and removed with silk; abdominal incision closed with silk-worm gut sutures.	Stitches removed 7th day; wound healed; on 14th day developed induration and tenderness at pedicles; convalescence slow owing to pelvic inflammation; left hospital December 18.	No Irrigation, no drainage.	R	Induration appeared; patient entirely well.
III. M. C. S.	Ger. 49 mar.	Dr. Reed, Massillon, Ohio.	Charity Hospital, Dec. 7, 1893.	Healthy; menstruated at 15; regular; had one child; menstruated regularly until March, '93, since then has not been unwell; in August, '93, noticed abdomen was enlarged; had pain in right pelvis; tumor grew steadily and rapidly; lost flesh; had great pain.	General appearance of one with malignant trouble; nodular, fluctuating tumor reaching above umbilicus; abdomen tense; great dyspnoea; greatly emaciated; pulse irregular and intermittent.	Free fluid in abdominal cavity; removed papillary cystoma of right ovary; cyst wall very soft and friable; adherent to intestinal tum and abdominal walls; cysts ruptured and handful of soft papillary masses were removed; left ovary also cystic and removed; pedicles ligated with silk.	Glass tube removed on 2d day; patient nourished and stimulated by rectal enemas; stitches removed on 15th day; set up in 3d week; went home January 20.	Irrigation; glass drainage tube.	R	Patient very nervous and continually fearing return of growth; general health in such improved.

OVARIOTOMIES.

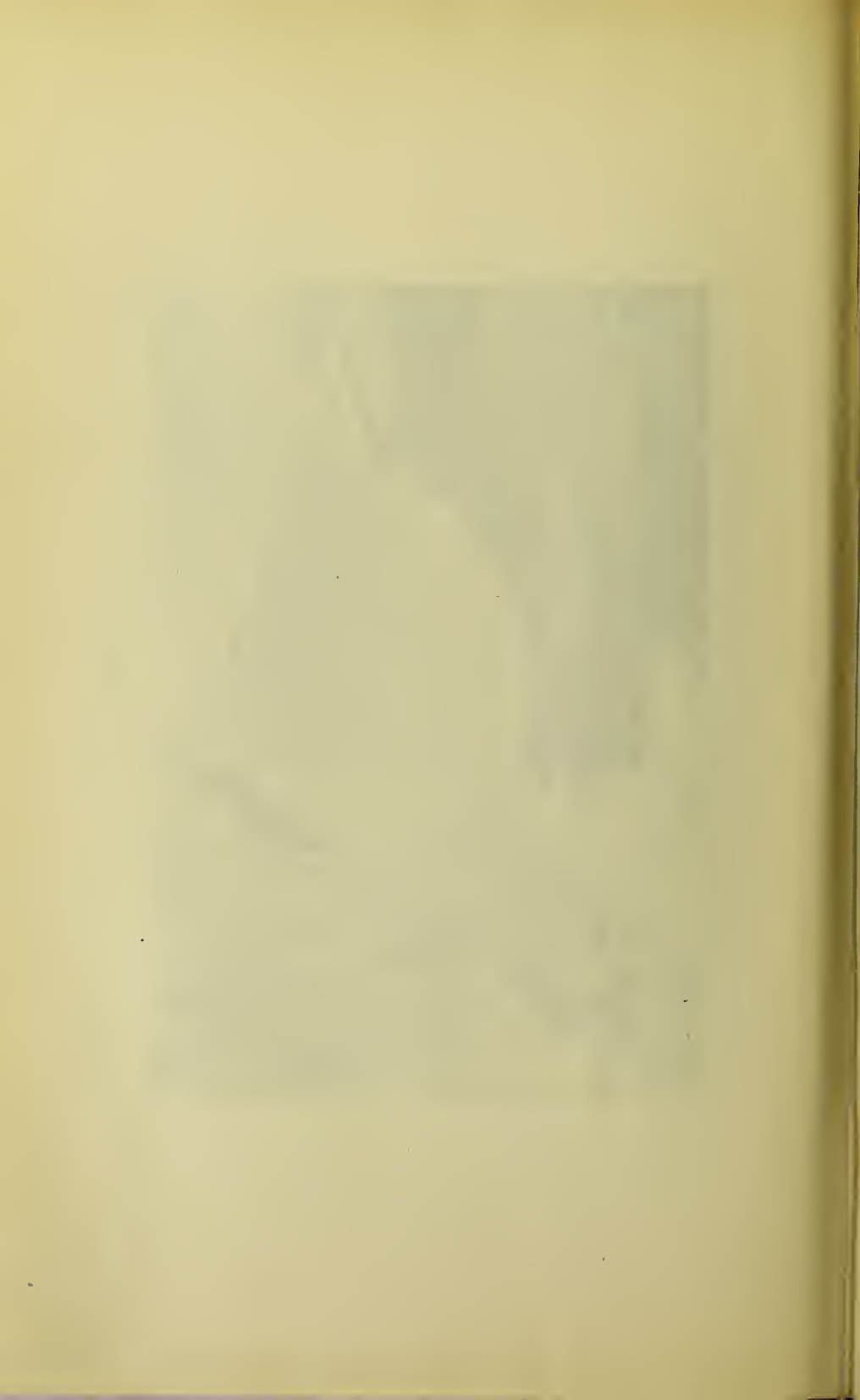
No.	Nat., age, social condition.	Patient sent by	Place and date of operation.	History of patient.	Examination.	Operation.	After Treatment.	Irrigation and drainage.	Result.	Remarks.
IV.	Am. 47	Dr. W. J. Scott.	Charity Hospital, Jan. 22, 1894.	Always healthy; menstruated at 14; regular; married at 27; never pregnant; in Summer of '93, noticed that abdomen was enlarged but thought it bloating from constipation; in October, '93, noticed tumor in left pelvis; commenced having pain; grew slowly until December, then increased rapidly in size.	Tumor extended to umbilicus; in distinct fluctuation; general health good.	Thick mucoid fluid in free peritoneal cavity from rupture of a cyst; removed multifollicular cyst of left ovary weighing 12 pounds; contents of cysts so thick that they could not be drawn off through largest trocar; right ovary cystic and removed; pedicles ligated with silk.	Stitches removed on 10th day; wound healed; patient made an uninterrupted recovery; left hospital March 4.	no	R	Complete recovery.
V.	Am. 33	Patient from James-town, Pa.	Lakeside Hospital, January 23, 1893.	Healthy; menstruated at 13; regular; in June, '93, noticed that clothes were tight; courses continued until October, '93, when they ceased; in September, '93, noticed a tumor in right iliac region; increased steadily in size.	Movable tumor extended to umbilicus; hard and nodular; could not make out fluctuation; free fluid in peritoneal cavity; lost considerable flesh.	Free fluid in peritoneal cavity; removed fibro-cystic tumor right ovary weighing seven ounces; adhesions to omentum and pelvic wall; left ovary cystic degenerated and removed; introduced tampon because of oozing from torn adhesions.	Tampon removed on 5th day; stitches removed on 10th day; wound healed with exception of point of introduction of tampon; uninterrupted recovery.	Irrigation; Mikulicz tampon.	R	Slow convalescence but steadily improving. Operated at chit.

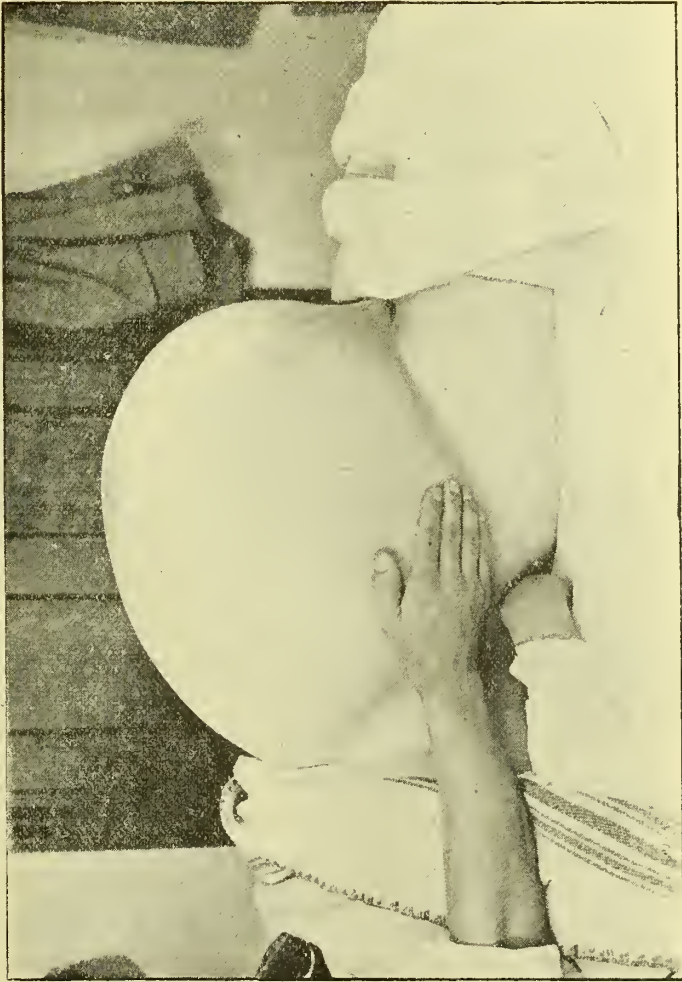
VI.	Bohem.	Dr. E. P. Hawley.	Lakeside Hospital, January 26, 1894.	<p>Healthy; had child 12 years ago; menstruated regularly until 4 years ago, when she commenced to increase in size; tumor grew steadily until Dec. '93, when it commenced growing rapidly; Dr. Hawley first saw patient 3 days before operation; patient lost flesh rapidly.</p>	<p>Removed multifollicular cyst of left ovary weighing 64 lbs; adhesions to intestines, omentum, pelvic and abdominal walls; thick chocolate colored fluid; right ovary cystic degenerated and removed; pedicles ligated with silk, adhesions with cat gut.</p>	<p>Patient in extreme shock; was stimulated to utmost, but gradually failed.</p>	<p>Irrigation: Mikulicz tampon.</p>	<p>Death from shock three hours after operation.</p>	<p>Operated before clinic; case given in detail below.</p>
VII.	Amer.		Charity Hospital, March 13, 1894.	<p>Healthy; menstruated at 14; regular; 4 children; normal labors; 5 years ago noticed that dresses were tight; in Sep. '92 noticed tumor in left iliac region; grew slowly but steadily until Sept. '93, then commenced growing rapidly; lost some flesh.</p>	<p>Removed multifollicular cyst of left ovary weighing 80 pounds; tumor adherent to omentum, small intestines, colon, abdominal and pelvic walls; right ovary cystic degenerated and removed; pedicles ligated with silk.</p>	<p>Patient in good condition after operation; tampon removed on 4th day; patient developed a severe cystitis which subsided under treatment.</p>	<p>Irrigation: Mikulicz tampon.</p>	<p>Complete recovery.</p>	



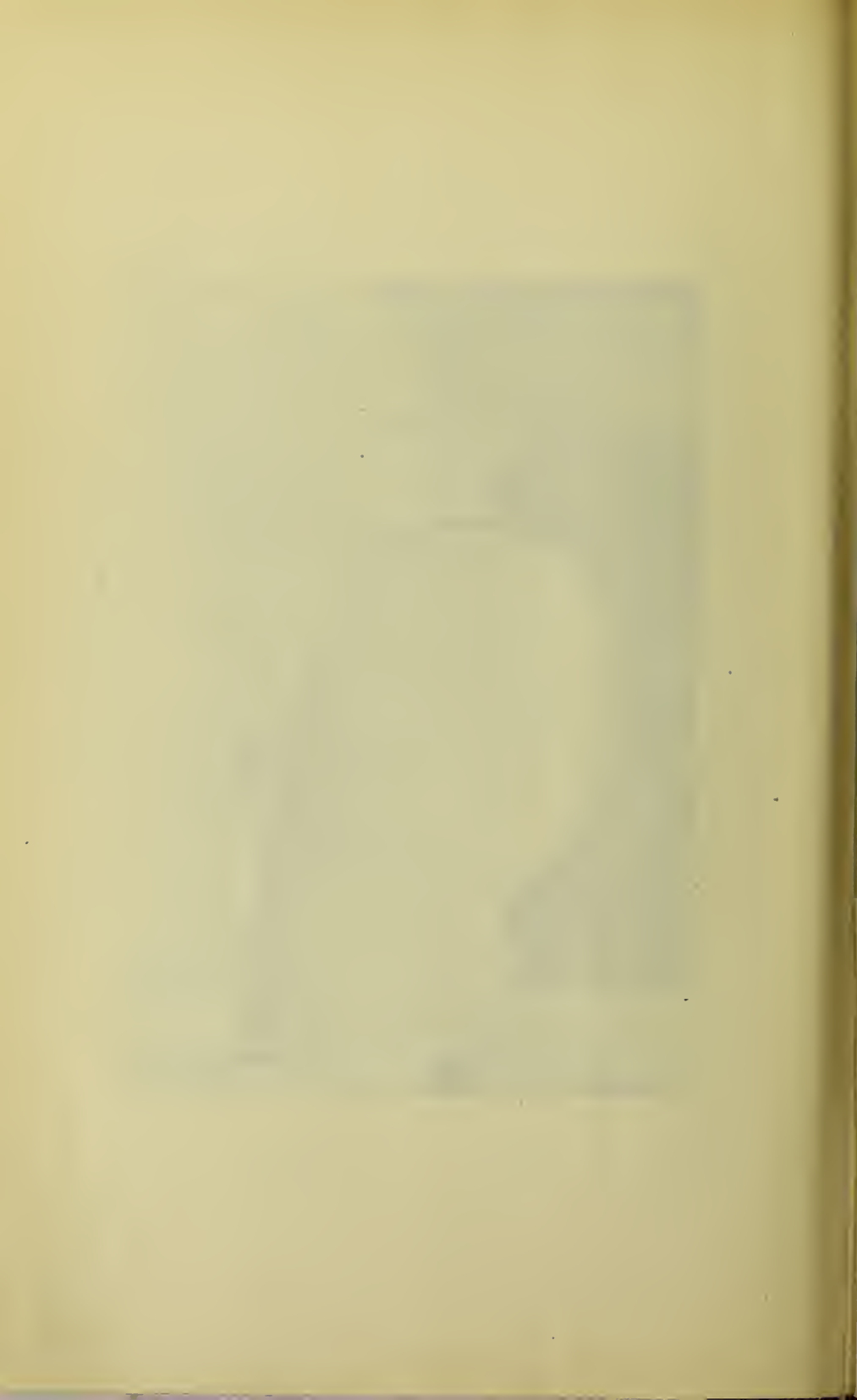


CASE VI. OVARIAN TUMOR, WEIGHING 54 LBS.





CASE VII. OVARIAN TUMOR, WEIGHING 80 LBS.



REMARKS ON OVARIOTOMY CASES.

The foregoing tables include seven operations for cystic disease of the ovaries, with one death. The cause of death being from shock. In three cases the abdomen was closed without drainage. In three cases a Mikulicz tampon was introduced, and in one case a glass drainage tube. Both ovaries were removed in all but one case. The following cases, with accompanying photographs, are reported somewhat in detail, owing to their enormous size.

CASE III. Had always been healthy until August, of 1893, when she noticed that the abdomen was somewhat enlarged, and had pain in the right pelvic region. The tumor grew steadily and rapidly, and the pain increased in severity. Dr. Allen first saw the case November 10, 1893. The diagnosis of ovarian cyst, possibly of a malignant nature was made, and patient was advised to remain and have the operation at once. She, however, insisted upon returning home, and did not present herself for operation until December 7th. During this time the tumor had increased rapidly in size, so that patient was unable to lie down, owing to the extreme dyspnœa. Patient had lost flesh, appetite was poor, and pulse irregular, rapid and weak. The patient urged an operation, even though the chances of recovery were small. On opening the abdominal cavity, considerable free fluid escaped. The cyst was adherent to the intestines, omentum and abdominal wall, and was so friable, that it tore upon being separated, even from the slightest adhesions, and the soft pulpy mass was removed in handfuls. The abdominal cavity was irrigated and a glass drainage tube introduced. The patient was freely stimulated before and during the operation, which was performed as rapidly as possible, owing to her weak condition. On the following day the drainage tube was removed, and the abdominal wound healed almost by first intention. The patient made a good recovery, but is of an exceedingly nervous disposition, and constantly imagines that another tumor is developing. Up to

the present time, however, there has been no sign of any recurrence. The tumor was a papillary cystoma of the ovary.

CASE VI. A Bohemian woman, thirty-four years of age. Was perfectly healthy until four years ago, when she noticed that her abdomen was increasing in size. In December, 1893, the tumor commenced to grow rapidly, and it became difficult for the patient to get around, owing to its excessive weight. No physician, however, was employed until January 23, 1894, when Dr. Hawley first saw the case. The same afternoon Dr. Allen was called in consultation. The patient was very much emaciated, the extremities were swollen and there was great dyspnoea, so that the patient was unable to lie down.

The physical signs were those of a multilocular ovarian cyst, containing a thick fluid. The patient was taken at once to Lakeside Hospital, and on the following day small doses of a mild chloride and oleum ricini were given without effecting a movement. The patient was unable to retain any nourishment by stomach, and it was impossible to build her up preparatory to an operation. The morning of the operation the patient had failed somewhat, but it was feared to delay longer, and the only hope seemed an immediate operation. This was performed before the clinic. The cyst was adherent to abdominal viscera and was so friable that it tore repeatedly while being separated from its adhesions. The contents were of a thick chocolate-colored fluid, and the entire cyst weighed 54 pounds. The other ovary was also found to be cystic degenerated, about the size of a fist, and adherent to the larger cyst. This was also removed, the pedicles being ligated with silk, and the adhesions with cat-gut. The operation was performed with every precaution, and as rapidly as possible, and stimulation was given before and during the operation to sustain the patient. The patient, however, did not rally, and died three hours later.

CASE VII. Five or six years ago noticed that her dresses were tight, but did not notice any growth until about one and one-half

years ago. She then slowly but steadily increased in size until six months ago, when the tumor commenced to grow rapidly. Dr. Allen first saw the case March 4, 1894.

The physical signs were those of an ovarian cyst of enormous size. The general condition of the patient, however, was excellent, and operation was strongly advised. This was performed March 13. The cyst wall was adherent to the abdominal viscera, but the adhesions were not dense, and could readily be separated. A multilocular cyst of the left ovary was removed weighing 80 pounds. The abdominal cavity was irrigated and a Mikulicz tampon introduced. The patient went through the operation nicely, and had a pulse at the close of 120. On the following day the gauze strips were removed from the interior of the tampon and the handkerchief was removed on the fourth day. The patient made a rapid and complete recovery.

IV.	Am. 46	Patient from Delphos, Ohio.	Clarity Hospital, March 13, 1894.	<p>Healthy; menstruated at 13, usually went over time; married at 20; 3 children, youngest 20; no miscarriages; 3 years ago noticed tumor, grew steadily; flowed more at periods, and in Feb., '94, had profuse hemorrhage. Never took any local treatment.</p>	<p>Patient very pale from loss of blood; tumor reached to umbilicus; physical signs of uterine fibroid.</p>	<p>Applied elastic ligature, incised uterus and enclosed several fibroids, one extending down into anterior lip of cervix; could not apply suture neud owing to cavity left by fibroid; tied stump of uterus with silk ligatures and extraperitoneally.</p>	<p>Mikulicz removed on 3d day; patient required vigorous stimulation for several days after operation; elastic stump on 8th day to hasten its separation; developed phlebitis on 23d day.</p>	<p>Irrigation, Mikulicz tampon.</p> <p>R.</p> <p>Patient made a complete recovery.</p>
V.	Am. 36	Dr. J. Smith, Collinwood, Ohio.	Lakeside Hospital, April 18, 1894.	<p>Healthy; menstruated at 13, was regular until 27, when periods came every two weeks; within last 4 years periods came every month, but amount of blood has been steadily increasing until now patient is left exhausted after each period; flowing lasts about 10 days; has been treated with electricity and hypodermics of ergot.</p>	<p>Operated in Trendelenburg position; uterus about the size of a fist; ovaries were adherent, tubes inflamed and fibrinated; adhesions; removed tubes and ovaries, ligating pedicles with silk; closed abdominal incision with sutures of silk-worm gut.</p>	<p>Had temperature of 102.25 on 14th day, and great pain in wound; 1st dressing on 10th day; wound had suppurated superficially, was opened and irrigated; healed by granulation; had severe cystitis.</p>	<p>No irrigation, no drainage.</p> <p>R.</p>	<p>Has had considerable trouble with bladder, but improving.</p> <p>Entirely well so far as former troubles are concerned.</p>

REMARKS ON FIBROID CASES

The preceding tables include five cases of laparotomy for uterine fibroids, with two deaths. The cause of death in one case being from embolus of the pulmonary artery, and in the other could not be definitely determined. In three cases the uterus was removed, and the stump treated extraperitoneally. In two cases in which the fibroids were small, the ovaries and tubes were removed. In only one case, was abdominal drainage employed.

In the cases of hysterectomy, the method of proceeding was as follows: After making the abdominal incision the broad ligaments were ligated with heavy silk, an elastic ligature was then placed around the cervix and tightly drawn. The uterus was then incised, and the fibroid enucleated, taking care not to infect the abdominal cavity. The broad ligaments were then cut, and a serre-neud placed around the cervix. The uterus was then amputated, and pedicle sutured in the abdominal wound. After the operation the serre-neud was frequently tightened during the first day. As fast as the pedicle dried it was cut away with scissors, and the depression finally filled and healed by granulation.

The following cases are given somewhat in detail:

CASE I. Had never been very healthy, and presented almost the appearance of one suffering from malignant trouble. At the operation it was noticed that the blood was very thin and pale, and did not clot. The patient was able to sit up about four weeks after the operation, but she did not gain strength, and it was feared for a time that there was some complication which had not been relieved by the operation. She was advised to return to her home in the country, and after a while commenced to improve. Patient was heard from one year after operation. Writes that she is now in better health than ever before, and is able to attend to all her household duties.

CASE II. Was in a poor condition at the time of operation, but hemorrhages were so extensive that it was impossible to delay

until the patient could be built up preparatory to operation. Everything went along nicely for about three days, when the temperature commenced going up and it was feared that septic infection had taken place. The fever continued for about a week, then gradually subsided, and the patient was considered to be out of danger. On the 12th day the serre-neud was removed, and a portion of the dried pedicle cut away. On the afternoon of the same day the patient suddenly complained of shortness of breath, and died about five minutes later. At the post mortem the iliac arteries were found to be thrombosed, and portions of the clot becoming detached, had been carried through the heart and into the pulmonary arteries, thus completely occluding them.

CASE IV. The fibroid lay in the anterior uterine wall and extended down into the cervix. After enucleation and amputation a deep cavity remained and it was impossible to apply the serre-neud, and at the same time drain this cavity. The pedicle was ligated with silk and sutured in the abdominal wound.

MISCELLANEOUS LAPAROTOMIES.

The following miscellaneous cases are of sufficient interest to report in detail:

(TUBERCULAR PERITONITIS.)

M. M. Age, 21. Colored. Single.

A rather delicate mulatto girl, had never had any particular illness; menstruated at 12; always regular. In Fall of 1891, had some pain in right pelvic region, and the abdomen commenced increasing in size. In May, of 1892, the abdomen was enormously distended, and was tapped, with removal of a wooden pailful of clear fluid. The abdomen did not refill, and during Summer patient regained her former health. During the following Winter, the patient again had pain in the pelvis, and was unable to do any work. From this time until April 1st, was confined to her bed a good share of the time. Entered Lakeside Hospital, April 20, 1893. Patient had a temperature ranging from normal to 102, great pain in pelvis, and unable to get around. Patient was examined under an anæsthetic, and hard indurated masses could be felt in the region of the tubes. A laparotomy was advised and performed on April 6th. The tubes and ovaries were in a mass of adhesions, and on the right side only a few shreds of tissue remained, surrounded by a soft caseous material. This was in part removed and a Mikulicz tampon introduced. The patient was in considerable shock at close of operation. The tampon was removed the fourth day, and daily dressings were made with irrigation of the wound. The temperature still continued, at times going to 103, but the general condition of the patient improved and the pain in the pelvis subsided. Patient left hospital July 9th, and returned to her home in Virginia. Letters from her physician state that a small sinus still remains, but that she is able to do light household duties. The case was undoubtedly one of tuberculosis commencing in the tubes with following peritoneal infection.

GUNSHOT WOUND OF THE INTESTINES.

M. B. Poie. Age, 11. Female.

Was accidentally shot in the abdomen at 7:30 a. m., May 12, 1893.

Dr. E. P. Hawley was called to see the case about 10 a. m., and Dr. Nevison was called at 11:30 a. m. Child was found in great pain, pulse about 125, very pale, and extremities cold. Had vomited blood shortly after the accident, and passages from the bowels were tinged with blood, but urine was normal. The ball, a .32 calibre, had entered the skin at about McBurney's point, and its course could be traced with a probe downward and inward toward the median line. It was decided to operate at once. Dr. Hawley gave ether. A median incision was made, and on opening the peritoneum a quantity of thin bloody fæces escaped, together with a small piece of a gingham apron which the child had worn. Commencing at the ileocæcal valve the small intestine was followed upward. Thirteen holes were found in the small intestine, these were closed with etage sutures of cat gut. The anterior surface of the sigmoid was also perforated, and the opening was closed in a similar manner. The bullet could not be found, and the condition of the patient did not permit of a prolonged operation.

The operation was made in a house in which there were no conveniences, and no facilities for flushing the abdomen. The abdominal cavity, however, was sponged as thoroughly as possible, and a tampon introduced into the pelvis. At the close of the operation, the patient was in extreme shock, but rallied under stimulation, and the following morning the condition seemed somewhat hopeful. The improvement, however, was only temporary, and she died 27 hours after the operation.

An autopsy by the coroner showed the openings in the intestine to be satisfactorily closed, but there had been a collection of bloody serum in the pelvis. The ball was found in the left iliac bone.

CHOLECYSTOTOMIES.

CASE I. N. R. American. Age, 49. Female.

Never very healthy. Since patient was 17 years of age she had been subject to attacks of colic, with pain in the region of the stomach. These attacks, however, had none of the characteristic symptoms of biliary colic ; patient had never been yellow, and had not noticed any peculiarity of stools or urine.

Since two years, patient has had symptoms pointing to disease of the stomach, solid food caused great distress, and was immediately vomited, but there had never been any blood in the vomited material. For fifteen months before the operation, patient had not taken any solid food, except a little chopped beef, very rare. During this time she had lost 82 pounds, and had a sallow complexion. No tumor could be felt. The stomach was washed daily for a number of days, preparatory to operation, which was performed on May 19, 1893. Dr. G. S. Lanterman of Bellevue, the physician of the patient, being present. After the patient was under the anæsthetic, a hard tumor could be felt in the region of the pylorus. On opening the abdomen in the medium line, the gall bladder was found greatly distended, and calculi could be distinctly felt in its interior. The general abdominal cavity was protected from infection by sheets of gauze, and the gall bladder opened between retaining sutures. Fifty-one gall stones, varying in size from a millet seed to a hickory nut, were removed. There was no lesion of the pylorus. The gall bladder was stitched in the abdominal wound, and a rubber drainage tube introduced. The remainder of the abdominal incision was closed with silk-worm gut sutures. The patient reacted nicely after the operation. Daily dressings were made, and at times the discharge of bile was profuse. The general condition of the patient, however, rapidly improved, and shortly after the operation she was able to take solid nourishment without any of the former inconvenience. Patient sat up in the third week, and went home about five weeks after the operation. Heard from patient February 26, 1894. Writes

that she is better than ever before in her life. A sinus still remains, and at times there is a profuse discharge of bile, but beyond this, she has no inconvenience from the wound.

CASE II. E. S. American. Age, 43. Male.

Always healthy. During last few years had taken freely of stimulants. On January 1, 1894, was taken with severe pain in the region of the gall bladder, which suddenly subsided on the following day. There was, however, no change in the color of the skin at this time. About February 1st, had second attack, and pain continued four days, and located over the region of the gall bladder. About the middle of February, had the third attack. This time, however, the pain was more over the region of the stomach, and not so severe as in the preceding attacks. Slight tenderness remained, and the patient noticed that the skin was of a yellow tinge. On March 6th, had a chill, and the temperature went to 104. March 7th, temperature 101, pulse 105. March 8th, temperature sub-normal, pulse 80 to 100. Dr. Allen was called in consultation by Dr. T. M. Sabin of Warren, March 8th. Patient was a corpulent man, skin of a decided yellow, abdomen tympanitic. Liver dullness extended from fifth rib in the mammary line to the border of the floating ribs. No tumor could be felt, but there was extreme tenderness on pressure over the gall bladder. It was decided to operate at once.

An incision five inches in length was made parallel to the border of the ribs. The liver was of normal color, the gall bladder small and fully distended. The contents were drawn off with an aspirating needle, and the gall bladder opened between retaining sutures. No calculus could be felt. The gall bladder was surrounded by dense adhesions of an inflammatory nature, and the walls were about one-fourth of an inch thick, and very dense. The adhesions extended around the common duct and prevented satisfactory exploration. The bladder was sewed to the abdominal incision, and glass drainage tube introduced. The remainder of the abdo-

minimal incision was closed with silk-worm gut sutures, with a gauze tampon around tube. The patient reacted well, with a pulse of 112. During following night, however, he became delirious, gradually failed and died 21 hours after the operation. No post mortem could be obtained.

INTESTINAL OBSTRUCTION.

Case I. F. P. American. Age, 42. Constipated habit.

July 16, 1893, taken with abdominal pain; injections brought away lumps of faecal material containing seeds. Cathartics and injections were repeated, without obtaining satisfactory movement, and the pain and tympanites increased. Dr. Allen was called in consultation July 22; found the patient in great pain with stercoraceous vomiting. Patient had had similar attacks before, but not so severe, and trouble had subsided under cathartics. Patient had had a left omental inguinal hernia, but there were no external evidences at this time. Operation was advised, and performed at once. Median incision. Intestines and omentum were found in masses of adhesions at the left inguinal ring. These were separated as far as possible, but the patient was not in condition to endure a prolonged operation. Patient regained consciousness about two hours after operation, then went into a collapse, and died about 28 hours later. No autopsy could be obtained.

Case II. C. J. B. Constipated habit.

Gave indefinite history of having had attacks of abdominal pain, but nothing of a severe nature. Had had typhoid fever several years previous. Was taken, Feb. 1, 1894, with abdominal pain, more severe along descending colon; mild chlorides and injections were given, but nothing beyond an evacuation of the lower bowel was obtained. Patient was extremely tympanitic; there were no symptoms pointing to an appendicitis. Dr. Allen was called in consultation Feb. 5th. Patient had been kept under influence of morphia to control the extreme pain; had no localized tenderness, excessive tympanites and nothing to be felt by abdominal palpation.

Operation advised and performed. Chloroform was given, but patient was not brought sufficiently under to relax the abdominal muscles. Median incision was made with lateral incision to the left. Adhesions were found around the descending colon, and at the splenic flexure. Gauze drainage was introduced, and abdominal incision closed with great difficulty, owing to the distended intestines and rigidity of abdominal muscles. On following day large quantities of flatus passed, with slight movements of the bowels. Patient for a time was much improved, but again commenced to fail, and died on the third day after the operation. No autopsy could be obtained.

Case III. H. M. German. Age, 17.

Gave history of having had attacks of inflammation of the bowels. Was taken sick March 26, 1894, pain in abdomen. Following day vomited and had diarrhea. March 28, Dr. Deucher was called; gave opium and bismuth and succeeded in checking diarrhea, but vomiting of a greenish fluid continued. Had regular stool daily until April 3d, when an injection brought away hard faecal lumps. Pain had been continuous and general until April 2d, when it seemed localized in left iliac region. Dr. Allen was called in consultation April 5th. Abdomen extremely distended and tympanitic, except in region of pubes, where it was flat, and fluctuation could be felt. Patient had no fever; pulse 100, and good. Was removed to Lakeside Hospital in afternoon, preparatory to operation the following morning. Rectal stimulation and nutrition was given, but during the night vomiting became excessive, and in the morning patient was decidedly worse; pulse weak and irregular; face cyanotic and anxious; eyes sunken; extremities cold, and had general appearances of patient entering collapse. Operation was almost hopeless, but was urged by the relatives at all hazards, and laparotomy was performed. Median incision was made and abscess containing about a quart of thin pus was opened; intestines adherent and general peritoneal cavity was not opened. Abscess cavity was flushed and

gauze tampon introduced. Operation was quickly over, and patient was stimulated to the utmost, but did not react, and died about seven hours afterwards. Autopsy on following day. Another abscess was found behind the caecum; which was in a mass of adhesions, and the appendix had been completely destroyed. Patient had never had any symptoms pointing to an appendicitis.

INGUINAL COLOTOMY.

G. N. P. American. Age, 53. Married.

Had paralysis of left leg since infancy. Had typhoid fever at 25. In spring of 1891, noticed he was more constipated than usual and that stools were streaked with blood, but had no pain with movements. Constipation steadily increased and patient lost flesh. In October, 1892, had a hemorrhage from the bowel and noticed that there was a considerable discharge of very offensive pus.

Patient was first seen in consultation with Dr. W. O. Jenks, of Nottingham, in February, 1893. Abdomen was slightly distended, no marked enlargement to be felt, but over descending colon was an irregular resistance, with slight dullness. Rectal examination showed a stricture high up in the rectum, formed by a dense, nodular mass, and covered with offensive pus. Patient was not taking much solid food, because of pain with each movement.

Colotomy was advised, but patient preferred to wait, and did not present himself for operation until July 27, 1893. In the meantime, his condition had become worse; there was extreme tympanites, and liberal doses of morphia were required to control the pain. Gradually less and less faecal material had passed, until now nothing but gas escaped at times. Hard lumps could be felt along the entire descending colon.

Laparotomy was performed under antiseptic precautions. Dr. Jenks gave the anæsthetic. Incision was made in left inguinal region. The sigmoid was sutured to abdominal incision, and owing to the extreme distention, it was opened at once to allow escape of

gas. Remainder of abdominal incision closed with silk-worm gut sutures. Patient reacted well. On fifth day bowels were moved with injections of oil, followed by water.

General condition of the patient improved for a while; took nourishment and the bowels moved regularly through the artificial anus. From time to time there would be passages of thin faecal material through the rectum, and there was an occasional discharge of pus and blood. The patient lived eight months after the operation. Autopsy showed an epithelioma in upper part of the rectum.

COMPLICATED PREGNANCIES.

CASE I. E. S. American. Married. Aged 30.

Always rather delicate. Menstruated at 15. Irregular, always over time. Never much in quantity. Married at 26. Since then been more irregular than formerly. At 27 had first child, normal labor, made a good recovery, never had any miscarriages. Was unwell in June, 1893, and in July and August courses did not appear. Had no trouble until about the middle of August, when she commenced vomiting, and could retain nothing on her stomach. Patient steadily failed, and was seen in consultation by three of the leading physicians of the city, who diagnosticated extra-uterine pregnancy. The vomiting became more severe, pulse weaker, and the patient steadily failed.

Dr. Allen was called in consultation September 13th, and found patient in a condition of extreme exhaustion. There was no abdominal enlargement to be seen, vaginal examination showed the cervix to be soft, the os patulous, and the finger could be readily introduced into it. An enlargement was to be felt in the pelvis, being well to one side. The examination was made with great care, as the diagnosis of extra-uterine pregnancy had been made, and it was necessary to transport the patient to the hospital. This was done the same day. On the following day it was apparent that the patient was steadily losing ground. The intention had been to anæsthetize the patient, preparatory to a thorough examination, and

whatever operative interference should be deemed wise. When placed upon the table and etherized, the patients' condition was so low that it seemed if she were to be saved at all by any operative procedure, it must be done at once, and with great speed. As the diagnosis of probable uterine pregnancy had been made, without waiting for further examination, an exploration was made at once. The uterus was found enlarged, drawn well to one side, and pregnant.

With one hand in the abdomen, a pair of large forceps were carried into the uterine cavity, the cervix thoroughly dilated, and the abdomen was closed by an assistant. The pulse at the close of the operation was 155, and patient in extreme shock. By free stimulation and heat, she revived, and was nourished by rectal injections. Vomiting ceased at once, and did not begin again for 36 hours, at which time it recurred. At the time of the operation no attempt was made to remove the foetus, as the patients' condition did not admit of it. On September 16th, an attempt was made to introduce a soft catheter, but this failed. September 17th the os was dilated with a Goodell-Ellinger dilator, and a catheter was introduced. In a few hours labor pains became severe, and a three months' foetus was expelled. Patients' condition improved at once, she took nourishment by stomach, for the first time in three weeks. The abdominal wound healed by first intention, and the patient made a rapid and complete recovery.

CASE II. N. P. American. Married. Age 27. Always healthy.

Menstruated at 13. Regular. Had two children, the younger three years of age. Inasmuch as the statements given by the patient at different times were wholly contradictory, it was impossible to get a correct history of the case, but the following is the best that could be obtained.

She menstruated in January, 1894, but failed to do so in February and March. She attempted to produce an abortion upon herself about April 10th. Was seized with severe pain afterward, and her

physician summoned. On his first examination he failed to detect any enlargement in the pelvis. There was a bloody discharge from the uterus, but the patient denied that she had tried to produce an abortion. A few days later the doctor could feel an enlargement in the pelvis, and on April 16th, Dr. Allen was called in consultation. As the patient denied an attempted abortion, the history of the case as given by the physician, lead Dr. Allen to diagnosticate an abortion. On examination Dr. Allen found an enlargement in the abdomen reaching nearly to the umbilicus. The physician in attendance said that at his last examination, two days previously, there had been nothing of the sort. The patient was very tender, and a thorough examination was impossible. The rapid increase in size, according to the statement of the attending physician, could with difficulty be accounted for on any other grounds than that it was due to an accumulation of blood. Inasmuch as the conditions of the patient were such as to render any surgical interference at her home very difficult, she was placed upon a spring mattress, and brought to the city, April 17th. On April 18th, an exploratory laparotomy was performed. The tumor was found to be the enlarged uterus. The os was immediately dilated, and the cervix and cavity of the vagina were packed with iodoform gauze, on removal of which a few days later, a three months' foetus was expelled. The abdominal wound was closed without drainage, and healed by first intention, and the further progress of the case was wholly satisfactory, the patient making a rapid recovery. She is now in excellent health.

These two cases are reported thus fully, on account of the peculiar circumstances surrounding them. The conditions in both were such that radical interference seemed imperative, and the conditions of the patients was so critical that if they were to be saved at all it must be with the least possible shock, and by a method which was absolutely sure; It was therefore determined in both of them to open and explore the abdomen as giving the operator

the best chance of positively diagnosticating the cases, and saving the patients' lives.

TUBAL PREGNANCIES.

CASE I. R. C. American. Aged 30. Married.

Always healthy; 2 children, last child 3 years ago. Periods have always been regular. December 10, 1893, suddenly taken with pain in region of right tube. Dr. E. F. Cushing called during afternoon, and found patient with normal temperature and pulse, slight nausea, and pain had subsided. Patient had gone five days over her period, but had no suspicions that she was pregnant. Patient was kept in bed, and was visited daily. December 13th, while still in bed, was taken suddenly, about 4 p. m., with severe pain in right pelvis, Dr. Cushing called at once, and found patient almost pulseless, and in extreme collapse. Dr. Allen was called at once, and performed laparotomy at 5 p. m. Abdominal cavity was full of blood, and right tube was found to be ruptured; this was ligated and removed; abdominal cavity was flushed, and Mikulicz tampon introduced. The operation was done with the greatest speed, and the patient freely stimulated by hypodermic and rectal injections. Patient was in most profound shock, and did not fully react until the following day. On the fourth day the tampon was removed, and daily dressings were made with irrigation of the cavity. Patient rapidly improved; wound healed entirely in about one month. Patient is now perfectly well.

CASE II C. F. C. American. Aged 24. Married.

Always healthy; menstruated at 13; not regular, until after 16; married at 19; no children; no miscarriages; was unwell the latter part of January, 1894. In February, courses did not appear, but patient noticed nothing beyond this, and did not suspect that she was pregnant. On March 25th, patient suddenly taken with pain in the pelvis; her physician, Dr. D. J. Merriman, of Painesville, was summoned, and found patient in collapse. Stimulants were given, and patient improved, but was kept in bed. A slight bloody dis-

charge occurred from the uterus, and continued until the operation. On April 1st, patient attempted to get up, and was taken with symptoms similar to those in previous attack, but more severe. At this time an indistinct fullness could be distinguished in the pelvis. Patient again rallied, but pain did not entirely subside, and she was brought to Cleveland on a cot, April 29th. Examination showed a dullness over lower portion of abdomen; cervix was soft, and os patulous. Laparotomy was performed on April 30th. Peritoneal cavity contained a small quantity of dark, bloody serum; right tube was enlarged, and ruptured into a cavity formed by the adhesion of intestines and omentum. Tube was removed, and pedicle ligated with cat-gut. Abdominal cavity flushed, and Mikulicz tampon introduced. During the operation a Meckel's diverticulum was discovered on the small intestine. Patient went through the operation nicely, and made an uninterrupted recovery.

SARCOMA OF MESSENTERY.

F. G. American. Aged 49. Had always been delicate. Two years ago noticed tumor in abdomen, slight pain, periods regular. Tumor grew slowly until three months before operation, when it commenced growing rapidly. Had frequent vomiting spells, but bowels were regular. Patient sent by Dr. Wagner, of Ravenna, O. Physical examination showed free fluid in abdominal cavity. Through this fluid a hard, nodular, movable tumor could be felt, but its attachments could not be made out. Operated at Lakeside Hospital, April 7, 1894. Median incision below umbilicus. Several quarts of a milky white fluid in free peritoneal cavity. A tumor about the size of an adult's head was lifted out of abdomen, but its removal was impossible as the mesentery of nearly all the small intestines was involved. Tumor was of a dark red color, and very vascular. Closed abdominal incision with silk-worm gut sutures. Patient reacted well, and everything went along nicely for several days, then heart commenced to let down, and patient died of exhaustion on 9th day. Post mortem showed abdominal cavity free from infection. Tumor involved nearly entire mesentery of small intestine.

VENTRAL FIXATION OF UTERUS.

H. J. German. Age 44. Widow.

Fifteen years ago had a fall, and three days later gave birth to a child. On getting up from confinement, uterus was found to be prolapsed. Pessaries of various kinds had been worn, but afforded no relief. Patient was operated by Dr. Howard Kelly, of Baltimore, at a complimentary clinic given him at Charity Hospital, on March 10th, 1894. The patient made an excellent recovery.

ABDOMINAL CASES NOT LAPAROTOMIES.

Psoas abscess.....	2
Sinus following laparotomy.....	1
Aspirations	4
Hernia	8
Nephrectomy	2
Nephrotomy	1
Total.....	18

PSOAS ABSCESS.—The patient was a child about 7 years of age. The first symptoms of spinal trouble were noticed about four years ago, and during the last three years the patient had been kept on his back in bed. There was slight kyphosis, and in the left iliac region could be felt a fluctuating mass, clearly defined. This was aspirated under antiseptic precautions, with removal of about a pint of pus. An injection of iodoform in glycerine was then made.

ASPIRATIONS.—In one case there was an extensive effusion into the peritoneal cavity, so that it was impossible to make a diagnosis. After removal of a bloody serum with an aspirator, a hard immovable mass could be felt in the pelvis, which was probably of a malignant nature. Laparotomy was declined and the patient died some weeks later. No autopsy could be obtained. The other three cases were aspirations of ovarian cysts of long standing, and operation was not advised because of the poor conditions of the patients, and the probability of extensive adhesions.

OPERATIONS FOR HERNIA.

No.	Age, sex, social condition.	In consultation with	Place and date of operation.	Diagnosis and duration.	Condition at time of operation,	Truss.	Operation.	After treatment.	Drainage.	Remarks.
I.	60, fem. mar.	Dr. C. Sihler.	Lakeside Hospital, May 13, 1893.	Right femoral hernia; 7 years.	Strangulated; 14 hours.	Yes.	Cut ring; returned intestine; tied sac with cat-gut; cut off and returned to abdominal cavity; sutured ring with kangaroo tendon.	Bowels moved third day. Temperature did not go above 101. Stitches removed on tenth day.	Iodoform gauze.	Uninterrupted recovery.
II.	33, male, mar.	Dr. S. E. Kastien.	Lakeside Hospital, July 28, 1893.	Left inguinal hernia; 16 years.	Incarcerated 9 days.	Yes.	Removed piece of omentum, ligated and removed sac, testicle softened, and was removed; ring sutured with kangaroo tendon.	Seventh day temperature went to 105; opened wound and considerable bloody serum escaped; temperature immediately came down, and patient made an uninterrupted recovery.	Iodoform gauze.	Had been operated 6 years previously but returned when truss was discontinued. Has been no return of trouble since last operation.
III.	36, fem. mar.	Dr. B. Krause.	Charity Hospital, Sept. 26, 1893.	Right inguinal hernia; 8 years.	Incarcerated 2 days.	No.	Removed a piece of inflamed omentum, ligated and removed sac; sutured ring with kangaroo tendon.	Bowels moved on third day; made rapid recovery; wound healed by first intention.	No drainage.	No recurrence.
IV.	22, fem. single.	Dr. H. J. Lee.	Charity Hospital, Oct. 2, 1893.	Right inguinal hernia; 6 years.	Reducible; could not be held by truss.	Yes.	Ligated and removed sac; sutured ring with kangaroo tendon.	Bowels moved fifth day; wound healed by first intention; temperature did not go above 99.3-5.	No drainage.	Uninterrupted recovery. No recurrence.

V.	25, male, mar.	Dr. L. J. Smith.	Lakeside Hospital, Oct. 20, 1893.	Left inguinal hernia, four years.	Reducible; hydro- cele on same side.	No.	Ligated and removed sac; sutured ring with kangaroo tendon; large hydrocele and softened testicle, which was removed.	First dressing on third day; removed drainage; on fifth day temperature went to 103 but came down to nor- mal with movement of bowels.	Iodoform gauze.	About six weeks after operation fell on ice and had considerable inflammation and swelling in wound, but this subsided without doing any injury. No recurrence.
VI. J. D.	56, male, mar.	Dr. B. Krause.	Charity Hospital, Nov. 13, 1893.	Left inguinal hernia, two years.	Incarcerated 3 days; symptoms of strangulation developed a few hours before operation.	No.	Incised ring; intestine caught on side. Sac ligated and removed; ring sutured with kangaroo tendon.	Bowels moved 6 hours after operation; temperature went to 103 on second day; made good recovery.	No drainage.	No recurrence; in ex- cellent health.
VII. J. M.	69, male, mar.	Dr. R. V. Gamble, New London, Ohio.	Residence, Jan 28, 1894.	Left inguinal hernia since a young man.	Strangulated; 12 hours.	Yes.	Incised ring; intestine very dark but circulation re- turned, tied and removed sac; did not sew up ring; packed wound.	Patient made an uninter- rupted recovery; wound healed by granulation.	Iodoform gauze.	Obtained radical cure.
VIII. T. W.	28, male, single,	Patient from Buffalo, N. Y.	Lakeside Hospital, April 4, 1894.	Left inguinal hernia, three months.	Reducible.	No.	Tied and removed sac; sewed ring with kangaroo tendon.	Drainage removed on fifth day; wound healed by first intention.	Iodoform gauze.	Left hospital three weeks after opera- tion.

OPERATIONS FOR HERNIA.—The foregoing tables include eight cases of operations for hernia, with no deaths. Seven operations were for inguinal hernia, and one for femoral. Five operations were upon males, and three upon females. Two operations were for strangulated hernia, three for incarcerated, and three for reducible. One case had been previously operated, with return of the trouble; four had worn trusses, and four had not. In seven cases, after ligation of the sack, and its return to the abdominal cavity, the ring was sutured with kangaroo tendon. In one case, in which there had been strangulation, with considerable injury to the tissues, the wound was packed with iodoform gauze, and healed by granulation. This case, however, was followed by radical cure. In no case has there been recurrence of the hernia, and none of them have worn trusses since the operation.

NEPHRECTOMY.

CASE I. G. H. W. American. Aged 44.

Had always been healthy, but of a nervous temperament. Four years ago had a nephritis, and several attacks of renal colic. Three years ago spent a season in Carlsbad, and returned much improved in health. Dr. C. D. Noble, of Oberlin, was called to the case on September 2, 1892. Found the patient had been losing flesh of late, and was very much emaciated. There was pain and tenderness in the left lumbar region anterior to the left kidney. The temperature ranged from normal to 103. On September 6th, there was distinct fluctuation, and Dr. Allen was called in consultation. An operation was advised, and performed on the following day. A vertical incision was made from the ends of the floating ribs to the crest of the ilium, the kidney was incised, and an abscess containing about two quarts of pus was opened, and the cavity flushed with boracic acid solution. The patient was not in condition to endure a long operation, and it was not thought advisable to attempt removal of the kidney. The wound was tamponed with iodoform gauze, which was allowed to remain three days. Daily dressings

were made, the temperature came down to normal, and the patient rapidly improved. During the following winter and spring the patient became quite fleshy, but a small sinus remained, and the patient urged a more radical operation for the entire removal of the kidney. He was advised to delay the operation, but circumstances were such that he could not, and an operation was performed on July 5th, 1893. The sinus was followed down to the kidney, which was only about one-half the normal size, and was drawn up under the floating ribs. It was surrounded by the most dense adhesions, and before its removal could be accomplished it was necessary to resect the 12th rib. A small opening was made into the peritoneum, but this was immediately closed with cat-gut sutures. The pedicle was ligated with cat-gut, and the wound tamponed with iodoform gauze. The patient was in considerable shock at the close of the operation, and his reaction was only partial. He was stimulated to the utmost, but gradually failed, and died 48 hours after the operation. The autopsy showed that everything in regard to the operation was in perfect order. The wound in the peritoncum had been satisfactorily closed, and there was no infection of the abdominal cavity. The patient had a thick layer of subcutaneous fat, and almost no muscular tissues. The heart was also fatty degenerated. There had been suppuration along the line of the ureter with stricture. The right kidney, however, was normal.

CASE II. E. T. American. Aged 52. Female.

Always healthy until November, 1893, when she commenced having hemorrhages from the right kidney. After the first hemorrhage she had no pain, but about two weeks later had a second hemorrhage which was followed by considerable pain in the right side. About this time she discovered an enlargement in the region of the right kidney. Four weeks later had a third hemorrhage, but not so severe. Patient was referred to Dr. Allen, by her physician, Dr. F. Jones, of Medina. On January 4th, had fourth hemorrhage, and consulted Dr. Allen the same day. A distinct tumor could be felt

in the region of the right kidney, with pain on pressure. The patient had lost flesh, and it was thought that the trouble was of malignant nature. An operation was advised and performed on January 12, 1894. An incision was made from the floating ribs down to the crest of the ilium with a transverse cut extending anteriorly. The capsule of the kidney was incised, the tumor enucleated, and the pedicle ligated with cat-gut. The kidney was about three times its normal size, extremely vascular, and microscopical examination showed it to be a sarcoma. The extremities of the incision were closed with sutures, with a tampon extending down to the pedicle. The patient made an excellent recovery, the wound being entirely healed about four weeks after the operation. The general condition of the patient is now excellent, and there has been no further trouble.

NEPHROTOMY.

G. W. American. Age 33. Male.

At the age of 19 had a fall, striking across the lumbar vertebrae, which was followed by paralysis of the lower extremities, from which he never entirely recovered. In October, 1891, Dr. Allen performed a perineal lithotomy for impacted calculus. The patient made a good recovery. The patient's general health improved, but he had at times attacks of renal colic, with pain in the region of the right kidney. Dr. Allen was called in consultation on October 20. The symptoms were those of calculi in the kidney, and it was decided to operate at once. A lumbar incision was made, the kidney opened, and several calculi removed from the pelvis. The patient was in very poor condition at the time of the operation, and did not react. He was stimulated to the utmost, but gradually failed and died 16 hours after the operation.

OPERATIONS UPON THE CHEST.

Resection of the rib.....	5
Aspirations	8
Abscess	2
Operations upon the breast.....	13
Total.....	28

RESECTION OF THE RIB.—Four cases were resections for empyemia following pleurisy, one for empyemia following a gun shot wound of the chest.

CASE I.—Was a very fleshy man with feeble heart. His condition was such that it was not thought safe to give him an anæsthetic, and the resection was made with a local anaesthetic of ice and salt. The pus was deep-seated between the lobes, and was small in amount. The process extended, and the patient died about three days after the operation.

CASE II.—Was a boy who came late to operation. In this case, as in the preceeding, the pus was deeply seated between the lobes. A free drainage was established, and for a time the patient improved. The other three cases made complete recoveries.

ASPIRATIONS.—In seven cases the aspirations were for serous effusions following pleurisy. The eighth case was a patient who had been several times operated for a melanotic sarcoma of the glands of the neck. An effusion took place into the left pleura, which, on aspiration, proved to be of a bloody, serous nature. The chest rapidly refilled, and was again aspirated, but his condition gradually grew worse, and resulted in death. No post mortem could be obtained, but it was thought probable that there was a metastatic growth in the pleura.

ABSCESSSES OF THE BACK.—One case was operated for an abscess, resulting from necrosis of the rib. Another was for an abscess following injury.

BREAST CASES.

No.	Nativity and age.	Sex and social condition.	Hereditary and injury.	Position of tumor.	History of patient.	Examination.	Operation.	Axilla cleared.	Drainage.	Wound healing.	Result.	Remarks.
I.	Amer. 39	Fem. mar.	None.	Left breast.	One child 18 years old; no trouble with breast at that time; year ago noticed small lump in breast, grew slowly, some pain.	Tumor size of an apple, nipple retracted, axillary glands involved.	Removed breast and axillary glands.	Yes.	No.	Wound retracted slightly and healed by granulation.	R.	Carcinoma; recurrence in stomach followed by death 14 months after operation. Never recurred in cicatrix.
II.	Ger. 59.	Fem. mar.	Nodule appeared in cicatrix of an old abscess.	Left breast.	Five children; mastitis after first confinement; year ago noticed lump in cicatrix and retraction of skin.	Tumor size of walnut under old cicatrix.	Removed breast and axillary glands.	Yes.	Yes.	Wound suppurated and discharged for 3 weeks; healed by granulation		Carcinoma; patient returned home and went into a state of dementia, from which she died about 2 months afterward.
III.	Amer. 47.	Fem. mar.	Had mastitis fourteen years ago in same breast.	Right breast.	Two children; 3 years ago then two lumps in other portions of breast and one near axillary border; shooting pains in last few months.	Tumors about the size of hickory nuts.	Removed breast and axillary glands.	Yes.	No.	Healed by first intention.	R.	Carcinoma; no recurrence.
IV.	Amer. 54.	Fem. wid.	None.	Left breast.	Two children; never had trouble following confinements; two years ago noticed lump in breast; 2 months ago noticed lump in axilla.	Enlarged glands in axilla; cicatrix from former operation.	Removed axillary glands.	Yes.	Rubber drain- age tube.	Wound healed by first intention.	R.	Carcinoma; no recurrence to date. Breast had been removed a year previously by surgeon of this city.

BREAST CASES.

No.	Nativity and age.	Sex and social condition.	Heredity and injury.	Position of tumor.	History of patient.	Examination.	Operation.	Axilla cleared.	Drainage.	Wound healing.	Result.	Remarks.
X.	Amer. M. H. 50.	Fem. mar.	None.	Right breast.	Seven children; no trouble following confinement; a year ago noticed lump; grew slowly; no pain.	Tumor size of a plum, irregular in outline.	Small abscess follow'd lines of milk ducts throughout the gland; removed entire breast; axilla not invaded.	No.	No.	Suppurated but dis- charged with- out re- traction of flaps.	R.	No tubercle bacilli to be found; case one of abscess fol- lowing milk ducts. Entirely well.
XI.	Amer. W. R. A. 53.	Fem. mar.	None.	Left breast.	Three children; no trouble after confinements; 4 months ago noticed lump; grew rapidly of late; pain during last week.	Tumor size of an egg.	Removed breast and cleared axilla.	Yes.	Rubber drain- age tube.	Healed by first intention.	R.	Carcinoma; no recurrence to date.
XII.	Amer. A. W. 18.	Fem. single.	None.	Left breast.	Year ago noticed lump in upper and inner quadrant of breast; grew slowly; no pain.	Tumor size of an egg.	Removed tumor only, making incision under fold of breast.	No.	No.	Healed by first intention.	R.	Adenoma.
XIII.	Amer. M. B. 30.	Fem. single.	None.	Right breast.	Two years ago noticed lump; growing slowly of late; no pain.	Tumor size of plum.	Removed breast and cleared axilla; skin drawn very tightly.	Yes.	No.	Healed by first intention.	R.	No recurrence to date.

The foregoing tables include 13 operations upon the breast. Eight operations were for carcinoma, four for adenoma, and one for a diffuse abscess. All cases recovered from the operation. One, however, died fourteen months later from carcinoma of the stomach, and one died about two months after the operation, having never entirely recovered her former health. Ten cases healed by first intention. In two cases the flaps were tightly drawn and retracted somewhat, and the wound healed by granulation. In one case, in which there were diffuse abscesses throughout the gland, there was suppuration and discharge of pus without any retraction. One case had been twice operated previously, but only the tumor removed. Another case had been operated with entire removal of the gland, but without clearing the axilla. The usual method of procedure was as follows: on the night before the operation an antiseptic dressing was applied. At the operation, when there was any question as to the diagnosis, the tumor was first incised, and if found to be malignant, the entire gland with the fascia of the pectoralis major, and in some cases portions of the muscle were removed. The incision was then extended to the axilla, and all the fat and glands thoroughly removed. In the case of adenoma the tumor alone was removed. In the case of diffuse abscess, the gland was removed without invasion of the axilla. In certain cases a rubber drainage tube or piece of gauze was used for drainage; the wound was closed with a continuous suture of silk, and an antiseptic dressing applied, with the arm tightly bandaged to the chest.

OPERATIONS UPON THE GENITO-URINARY ORGANS.

OPERATIONS ON MALES.

Supra pubic lithotomy.....	1
Perineal lithotomy.....	1
Supra pubic cystotomy	1
Perineal cystotomy.....	1
Perineal section.....	3
Internal urethrotomy	4
Varicocele	4
Hydrocele	2
Enuclation of testicle	2
Epithelioma of scrotum	1
Circumcision.....	5
Total.....	25

OPERATIONS ON FEMALES.

Vaginal hysterectomy	3
Sloughing fibroids of uterus.. ..	2
Tumor of cervix.....	2
Amputation of cervix.....	1
Lacerated cervix.....	8
Alexander's operation.....	1
Cyst of labia.....	1
Recto-vaginal fistula.....	1
Pelvic abscess.	1
Operations for lacerated perineum.....	4
Operations for cystocle.....	2
Dilatation and curetting.. ..	15
Total.....	41

OPERATIONS ON MALES.

LITHOTOMY.

In the case of supra-pubic operation, the bladder was drained by two large catheters inserted through the wound, and the bladder washed with boracic-acid-solution.

In the case of perineal lithotomy the calculus had become encysted in the neck of the bladder.

CYSTOTOMY.

CASE I.—Was a patient who had suffered for several years from cystitis. Everything in the way of constitutional and local treatment had been tried. The pain was so severe that the patient was unable to do work of any kind. Supra-pubic cystotomy was performed, the bladder drained and washed at frequent intervals. No improvement took place for several weeks, but treatment was continued, and the patient is now entirely well.

CASE II.—Was a child two years old.

The mother noticed that the child would cry when urinating, and on two occasions preceding the operation there had been retention, which was finally relieved by hot applications.

August 18, 1894. Child again had retention which was not relieved by applications. Patient brought to office with bladder distended to umbilicus; catheter could not be introduced; was sent to hospital and supra pubic cystotomy performed; neck of bladder presented what seemed to be a diverticulum. Drainage tube introduced into wound. On removal of tube two weeks later urine was voided normally for a time, but the symptoms returning, a perineal lithotomy was performed September 18. Patient made excellent recovery, and has had no further trouble.

PERINEAL SECTION.—THREE CASES.

CASE I.—Patient, a boy of 17 years of age, had a fall and struck on the perineum. Retention of urine followed and perineal section performed. The urethra was found to be ruptured completely across. The two ends were found and stitched together with catgut,

a soft rubber catheter introduced into the bladder. This was removed about the fifth day. Sounds were passed at intervals, and patient has made a complete recovery.

CASE II.—Patient, thirty years of age, had a stricture resulting from an old gonorrhœa. Patient had had retention of urine on numerous occasions, and had been able to relieve himself by the use of a small catheter. About a week before he came to operation he broke off about two inches of the catheter and all attempts to remove it with forceps were unsuccessful. A perineal section was performed as a last resort, the broken catheter removed and the surrounding urethra found to be gangrenous. The wound readily healed but patient has neglected the passage of sounds, and the stricture has partially returned.

CASE III —Was for retention of urine following stricture. The case presented no unusual appearance, and made a complete recovery.

INTERNAL URETHROTOMY.

All the cases were for strictures resulting from gonorrhœa. Maissonneuve's urethrotome was employed, with the usual after treatment by passage of sounds.

VARICOCELE.

The method of open incision with ligation and resection of a portion of the veins were employed. The wounds were closed without drainage and sealed with a dressing of collodion. In one case considerable suppuration followed, owing to the early removal of the patient from the hospital to his residence. The wound, which was in excellent condition before his removal, became inflamed and a small abscess formed. This was incised, and the patient has made a complete recovery.

HYDROCELE.

The method of incision with extirpation of the sack was employed. Both cases healed by first intention, and there has been no recurrence.

ENUCLEATION OF THE TESTICLE.

CASE I.—Patient, about 43 years old, had been previously operated for varicocele. After the operation patient had extreme pain in the testicle, so severe that he became melancholic, and insisted upon the removal of the organ. This was done, and there has been no further trouble.

CASE II.—A hydrocele of long standing.

Upon incision the testicle was found to be worthless, and extirpation was deemed preferable to the ordinary method of excision.

EPITHELIOMA OF THE SCROTUM.

The patient about 45. About three years previous noticed a small excoriation on the scrotum. This refused to heal, the base became more indurated, and the ulceration extended slowly until it reached about the size of a nickel. Excision was performed; the wound healed by first intention, and there has been no recurrence. Microscopic examination showed it to be an epithelioma.

CIRCUMCISION.

The circular method was employed with the addition of a dorsal incision when necessary.

OPERATIONS ON FEMALES.

VAGINAL, HYSTERECTOMY.

Two operations were for complete prolapse. Both patients made uninterrupted recoveries. The third case was for carcinoma of the cervix. The operation was unusually difficult owing to inflammatory deposits in the broad ligaments. The patient did not react well after the operation, and died on the third day.

SLOUGHING FIBROIDS.

One case, a patient of 42, was in a septic condition at the time of operation. A sloughing mass presented through the os; this was seized by forceps, the capsule incised, and the tumor torn from its attachments. About two weeks after the operation, patient had an exhausting hemorrhage which was temporarily controlled by a

tampon. On the following day the tampon was removed and hemorrhage again took place. Examination showed it to be from the circular artery which was ligated. The patient made a complete recovery.

In the second case a similar method was pursued, and the patient made an uninterrupted recovery.

LACERATED CERVIX.

Cat-gut was used for sutures in all cases with perfect results.

RECTO-VAGINAL FISTULA.

Fistula was about an inch and a half above the sphincter ani. A grooved director was introduced and the recto-vaginal wall divided to the fistula, the edges of which were also freshened. The mucus membrane of the rectum was sutured with fine cat-gut and the perineum with deep sutures of silver wire. A perfect result was obtained.

PELVIC ABSCESS.

Origin of abscess in the tubes. Opening made through posterior vaginal wall, and cavity flushed and packed with iodoform gauze. Daily dressings were made and wound closed in about eight weeks.

OPERATIONS FOR LACERATED PERINEUM.

Tate's operation was performed in all cases with silver wire for the deep sutures.

DILATATION AND CURETTING.

After curetting the interior of the uterus it was treated with applications of Churchill's Tr. of Iodine or Liq. Ferri Perchlor, and packed with iodoform gauze.

OPERATIONS UPON THE RECTUM.

Hemorrhoids.....	6
Fistula.....	10
Fissure.....	5
Peri-rectal abscess:.....	4
Stricture.....	4
Epithelioma.....	1
Total.....	<u>30</u>

HEMORRHOIDS.

Allingham's operation by ligature through the base was performed in all the cases. After the operation a short drainage tube, wrapped with iodoform gauze, was inserted into the bowel and held in place by a T bandage. This dressing was borne with great comfort by the patient, and facilitated the escape of flatus. The bowels were moved about the fourth or fifth day, the injection being given through this tube.

FISTULA.

The sinuses were opened and curetted and wound packed open with gauze. The greatest care was taken at subsequent dressings to keep the wound well packed to the bottom, in order that no small fistulous tracts would remain behind.

One case had been running for ten years. One of the sinuses having burrowed through the gluteal muscles and opened near the great trochanter. This entire surface was incised, and the patient has made a complete recovery.

FISSURE.

In three cases the fissure was dissected out and the wound closed with cat-gut sutures. All three cases healed by first intention, and the patients had no further trouble.

In two cases the fissures were so extensive that they could not be sewed up, and after curetting were left to heal by granulation.

PERI-RECTAL ABSCESS.

Incision and curetting.

STRICTURE.

Two cases were caused by ulcerations and subsequent cicatricial contractions. One case was of syphilitic origin and the other a cicatricial contraction following an operation for imperforated rectum.

EPITHELIOMA OF THE RECTUM.

The case was a lady, whose first operation was reported in our RESUME of last year. The first operation was performed May 13, 1892, when a pedunculated mass was removed, and further examination by the microscope showed it to be an epithelioma. No recurrence took place until the summer of 1893, when a nodule appeared near the old cicatrix. This caused no pain, but grew slowly and the surface ulcerated. A second operation was performed October 1, 1893. The growth was removed, and wound again healed. There has been no further trouble up to date.

OPERATIONS UPON THE HEAD AND NECK.

Trephining	1
Abscess of frontal sinus	1
Abscess antrum of Highmore.....	1
Abscess mastoid.....	3
Retropharyngeal abscess.....	1
Periostitis skull.....	1
Periostitis superior maxillary.....	1
Periostitis inferior maxillary.....	1
Abscess of neck.....	4
Abscess parotid.....	1
Sarcoma parotid.....	2
Sarcoma of inferior maxillary.....	1
Goiter.....	1
Angioma of tongue.....	1
Carcinoma of floor mouth	1
Nævus	2
Epulis.....	1
Ranula.....	2
Epithelioma of forehead.....	1
Glandular tumor of neck.....	4
Tonsillotomies	4
Atheromata	8
Operation for deviation of septum.....	1
Resection of infra-orbital nerve.....	2
Laryngotomy for foreign body.....	1
Cleft palate.....	2
Harelip	10
Total.....	59

TREPHINING.

The patient was hit on the head with a brick while passing a building in process of construction. He was not rendered unconscious by the blow, and did not consider himself severely injured. Several hours later he walked to Dr. Allen's office, and on examination it was found that a piece of the skull, about the size of a quarter, had been broken and depressed. The patient was sent at once to the hospital, and the piece of bone removed. He made an uninterrupted recovery.

ABSCESS OF FRONTAL SINUS.

Patient was about 50 years of age. Six months previous to time of operation she had influenza, with severe frontal headache. Shortly afterward she noticed some swelling between the eyes, which steadily increased in size. In January she presented herself at the clinic. Examination showed a fluctuating tumor about the size of an egg, between and slightly above the eyebrows. An operation was advised and performed. On making the incision about four ounces of pus was evacuated. There was an opening in the bone about the size of a dime, and the cavity within measured two and one-half inches in depth, and about two inches in diameter. The wound was tamponed with iodoform gauze and daily dressings made; with irrigation of the cavity. A small sinus remained at the last examination, several months after the operation, but the patient suffered no inconvenience.

MASTOID ABSCESS.

The following case is worthy of report somewhat in detail.

W. S. Age 4. In January, 1894, had scarlet fever, followed by inflammation of the middle ear. The physician in attendance made an incision over the mastoid, and drilled into the bone. On April 29, Dr. Darby was called to the case. The child had a high fever and was delirious, and there was swelling and extreme tenderness over the region of the mastoid. Dr. Allen was called in consultation the same day.

On April 30 an incision was made and the mastoid cells opened with a chisel. The interior of the bone was thoroughly curetted, and it was noticed that pus was escaping through an opening communicating with the interior of the skull. This was enlarged with a chisel, and about 4 or 5 ounces of pus was evacuated from the interior of the skull. The wound was packed with iodoform gauze, and daily dressings made. The condition of the child after the operation was considered hopeless, but he rapidly improved, and was able to leave the hospital about a month after the operation. The child was seen in October, 1894, and is entirely well.

ABSCESS OF THE PAROTID.

This case is reported among the operations for appendicitis. The gland was incised two days after the swelling was first discovered, and before an abscess of any size had formed. Minute points of suppuration, however, could be distinguished throughout the gland. The patient survived the operation only a week, dying of general infection.

SARCOMA OF THE PAROTID.

CASE I. M. M. Age 16.

Two years previous discovered a swelling in the region of the left parotid, this steadily increased in size, and was removed by a local surgeon. The growth reappeared a few months later, and was again removed. In May, 1893, consulted Dr. Allen. The growth was about the size of a walnut, and was growing steadily. An operation was advised and performed, and the former cicatrices removed together with the tumor. There was considerable depression after the removal of the growth, and during the operation the facial nerve was wounded, so that for a time there was complete paralysis of the side of the face. Four months after the operation the patient was seen, and the paralysis was scarcely noticeable at that time. There had been no return of the growth.

CASE II. J. B. Age, 49.

Two years ago noticed a swelling in region of the right parotid.

This grew for a time and then ceased. About three months before the time of operation the tumor commenced to grow rapidly, and on January 20, 1894, an operation was performed. On incising it was found that the tumor was a melanotic sarcoma, and could only be partially removed. The incision healed by first intention, and the tumor was injected with erysipelas. This, however, seemed to have little effect, and the treatment was discontinued. For several months after the operation there was no change in the tumor, but of late it has commenced increasing slowly in size.

SARCOMA OF INFERIOR MAXILLARY.

M. P. Age, 22.

In July, 1893, noticed a slight swelling of the lower jaw, about the region of the bi-cuspid teeth. In August consulted Dr. Allen, and a piece of the tumor was removed for microscopical examination, and proved to be an osteo-sarcoma. The patient consulted Drs. Bull and Lange, of New York, and operation was advised by all. On October 2, the growth was removed and the bone chiseled away, leaving only a thin rim along the inferior border. The mucus membrane of the mouth was sutured, and drainage was established through the external opening by means of iodoform gauze. For some time after the operation, small spicules of bone were discharged through the sinus. The wound has entirely healed, and one year after the operation there had been no signs of any recurrence.

GOITER.

R. D. Colored. Age, 38.

Always healthy. When 14 years of age a lump appeared in the neck near the median line. Ointment was applied and the tumor disappeared. At the age of twenty an enlargement was noticed on the right side of the neck in the region of the thyroid gland. This grew rapidly for a time and then more slowly, until five years ago when it ceased growing, and another tumor appeared in the corresponding region on the left side of the neck. This has grown slowly but steadily. Patient was first seen by Dr. Allen, in September,

1893. The growth on the right side was found to be the size of a fist, lobulated and movable. The tumor on the left side was about the size of an egg. The patient complained of shortness of breath and the voice had changed somewhat of late. The entire growth moved with the larynx during deglutition. An operation was performed on September 19, and the tumor on the right side was removed. The wound healed by first intention and the patient was advised to have the other side operated at a later date, but she suffers little inconvenience, and prefers to delay until the symptoms are more urgent.

NÆVUS.

In one case the tumor was dissected out with an elliptical incision, and the wound healed by first intention. In the other case the discoloration was too extensive to permit of excision, and the galvano cautery was applied.

RANULA.

The cysts were dissected out with scissors and the bases cauterized, in order to destroy any portions of the sac which might remain behind.

ATHEROMATA.

The following case is of peculiar interest. Patient had an atheroma of the scalp, which suppurated and discharged, and a small sinus remained which had been discharging for about two years. In April, 1894, Dr. Allen incised under cocaine, and removed the sac. It was noticed, however, that the edges of the wound were indurated, and a piece was removed which proved to be an epithelioma. At a subsequent operation an elliptical incision was made, removing the entire growth, and healing took place by first intention. There has been no recurrence.

RESECTION OF INFRA ORBITAL NERVE.

Both operations were for neuralgia of long standing. In both cases there was immediate alleviation of the symptoms, and the patients have remained perfectly well.

CLEFT PALATE.

CASE I.—A girl nine years of age. The cleft extended through the soft palate, and through about three-fourths of the hard palate. The operation was a perfect success, the wound healing by first intention.

CASE II.—Was a child two years of age, an operation had been performed several months previously, but the flaps had not united. A second operation was performed by Dr. Allen. The soft palate united, but the stitches in the hard palate gave way. The case, however, is somewhat improved, and will be able to wear a plate to fill in the hard palate.

HARELIP.

Two operations were for double harelip and the remainder were for clefts on one side only.

OPERATIONS UPON THE UPPER EXTREMITIES.

Effusion elbow joint.....	1
Tubercular abscess elbow.....	1
Metastatic abscess shoulder.....	1
Necrosis wrist.....	1
Resection elbow.....	2
Reduction dislocated humerus.....	1
Reduction dislocated elbow.....	2
Bullet in hand.....	1
Needle in hand.....	2
Ganglion.....	2
Tenotomies.....	2
Web fingers.....	2
Dupuytren's contraction.....	1
Sarcoma.....	1
Resection ulner nerve.....	1
Phlegmon.....	8
Amputations.....	6
Total.....	35

EFFUSION ELBOW JOINT.

Patient received injury several months before the time of operation. There was no serious inflammation at the time, but tenderness remained, especially on moving the joint. Elastic bandages had been tried, but the effusion did not disappear. Aspiration with removal of the fluid, and injections of iodoform and glycerine were followed by complete recovery.

TUBERCULAR ABSCESS OF THE ELBOW.

Patient, a boy about 18, received injury to left elbow when about 12 years of age, made complete recovery and had no trouble

until about four months before operation, when joint became swollen and very tender. An abscess was opened and drained, and injections of iodoform were employed, but sinuses remained which opened from time to time, and the joint being ankylosed, the patient later came to a resection.

METASTATIC ABSCESS SHOULDER.

Patient confined about three weeks before operation, had miserable surroundings and was in poor state of health. Septic infection took place, and a few days before operation inflammatory symptoms developed in right shoulder. An abscess containing about two pints of pus was opened and drained, but patient already being in a septic condition did not rally after the operation, and died the following morning. Post mortem showed head of humerus and glenoid fossa denuded of periosteum. The abscess had dissected backward under the sub-scapular muscles, into the axilla, and half way down the humerus.

RESECTION OF ELBOW.

CASE I. L. T. Milliner. Age, 23.

No history of tuberculosis. Injured right elbow six years ago, but had no trouble until about two years ago, at which time the joint became swollen and tender around the elbow. An abscess formed which was opened six weeks before the operation, and a sinus remained which discharged from time to time. The joint was partially ankylosed, and very tender on pressure. Resection was performed, the end of the humerus removed, and also the head of the radius and olecranon. The wound was closed, with iodoform gauze drainage, and placed in a plaster dressing, with a window cut through over the wound. The wound was entirely healed about four weeks after the operation. An elastic bandage was worn for several months to support the joint. The patient was seen one year after the operation. Can sew as well as before, can place the hand on top of the head, and has excellent control of the extremity.

CASE II. B. B. Age 28. Dislocated right elbow June 1, 1893.

In August an attempt was made to reduce the dislocation, but without success. In October a resection was made, and a portion of the ulna removed. On the second day the patient developed delirium tremens, and tore the dressings from the arm. The patient was in a bad condition for about ten days, the wound suppurated and healed by granulation. Patient was seen about eight months after the operation. Can raise hand to the mouth, and extend it nearly straight.

GANGLION.

In both cases the ganglion was dissected out, and the wound closed. Healing took place by first intention.

WEB FINGERS.

CASE I. Bohemian child. Two years of age.

The index, middle and ring fingers were webbed to their extremities.

They were divided and the surfaces between the fingers covered with skin flaps. Healing took place by first intention.

CASE II.—Patient burned the hand about three months before the time of operation. This was followed by a cicatrix which united the little and ring fingers about one-half their length. An operation similar to the previous one was made with complete success.

DUPUYTREN'S CONTRACTION.

A V shaped incision was made and bands dissected out. Union took place by first intention.

SARCOMA.

Tumor was situated on posterior surface of the thumb. Was about the size of an English walnut, and the skin over the tumor very thin and about to break down. The growth was removed and proved to be a cysto-sarcoma. The operation was made under cocaine, and was followed by some suppuration. There has been no local recurrence.

RESECTION ULNER NERVE.

Patient received a perforating injury along ulnar border of the

hand. This was followed by inflammation and extreme pain in the parts supplied by the ulner nerve. Amputation of the little finger was performed, with removal of the corresponding metacarpal bone. The pain, however, did not subside, and resection of the ulner nerve was performed just above the wrist. Only slight improvement has taken place.

AMPUTATIONS.

Wrist 1. Fingers 5.

The amputation at the wrist was performed for an injury which completely destroyed the hand.

Two amputations of the fingers were for necrosis, two for cicatricial contractions following burns, one for injury.

OPERATIONS UPON THE LOWER EXTREMI- TIES.

Caries.....	2
Necrosis.....	3
Bursa great trochanter	1
Periostitis, (tibia)	1
Cauterization knee for tuberculosis	1
Cauterization of ankle for tuberculosis	1
Periarthritic abscess knee	1
Abscess of thigh, following fracture.....	2
House maid's knee.....	2
Floating cartilage knee.....	2
Needle in thigh.....	1
Tenotomy.....	2
Operations for club foot.....	7
Atheroma (suppurating).....	1
Lipoma.....	1
Lymphoma groin.....	2
Ligation of femoral artery following injury.....	1
Phlegmon foot.....	1
Amputations.....	5
Total.....	37

CARIES OF THE TIBIA.

In one case the process had extended to the ankle joint, which was opened during the operation. The tubercular material was curetted out, and the patient made an excellent recovery with good use of his ankle.

In the second case the process had involved the periosteum, extending about one-half way up the tibia. This case later came to a second operation.

NECROSIS.

In one case the process had commenced in the great trochanter. In another case the process had involved the entire shaft of the tibia, and the incision was made from the tubercle of the tibia nearly to the ankle joint. The sequestrum was removed, and the entire interior of the bone scraped. Both patients are entirely well.

BURSA OF THE GREAT TROCHANTER.

Patient was a lady about thirty years of age. There was a history of tuberculosis in the family, and the case had been diagnosed as one of hip joint disease. On examining the case it was found that there was good motion of the hip joint, but an enlargement could be distinctly felt over the great trochanter. On cutting down, a soft inflammatory mass was found lying over the great trochanter, but the bone was not involved. The cavity was curetted and packed with iodoform gauze, and healing took place by granulation.

PERIARTHRITIC ABSCESS OF THE KNEE.

The patient had been injured while playing foot-ball and an acute inflammation followed, which involved the pre-patellar bursa. A small opening had been made, but the inflammation was extending, and threatened involvement of the joint. Lateral incisions were made, and free drainage established. The case made a good recovery without the extension of inflammation into the joint.

HOUSE MAID'S KNEE.

In both cases the bursa was dissected out, and the cases healed by first intention. The incision was made at the side in order that the cicatrix might be in a place less liable to pressure.

FLOATING CARTILAGE OF THE KNEE.

The joint was opened and the cartilage removed. In one case the effusion in the joint was bloody, the trouble having been caused by an injury.

OPERATIONS FOR CLUB FOOT.

CASE I.—A. P. Age, 8. Extreme equino-varus. At the first

operation, May 24, 1893, the planter fascia was divided and a wedge-shaped piece of bone removed from the outer border of the foot, and a plaster bandage was applied. On July 4 a second operation was performed, and the tendo-Achilles divided. The foot was again placed in a plaster cast, and allowed to remain for several weeks, when a brace was fitted and worn for several months. The patient has excellent use of the foot and there is scarcely any deformity.

In the other cases tenotomies alone were made.

AMPUTATIONS.

One amputation of the thigh for tuberculosis of the knee. One amputation of the leg for injury. Three amputations through the metatarsis for injury of the foot.

MISCELLANEOUS CASES.

Skin grafting.....	1
Resection coccyx.....	1

SKIN GRAFTING.

Patient had extensive cicatrices on posterior surface of both hands as a result of burns. Cicatrix was dissected away and Thiersches, method of grafting employed.

RESECTION OF COCCYX.

Patient had had a fistulous opening since birth, which at times would close and again open, with a discharge of thin pus. Fistula could be traced with a probe to the border of the coccyx. No connection could be established with the rectum. At the operation the fistula was found to extend to the anterior surface of the coccyx, which it became necessary to remove in order to complete the operation. The anterior surface of the bone was partially denuded of its periosteum. Case was undoubtedly one of congenital cyst, with suppuration of the sac and later involvement of the bone.

